

# Remote I/O Catalogue 2016/2017

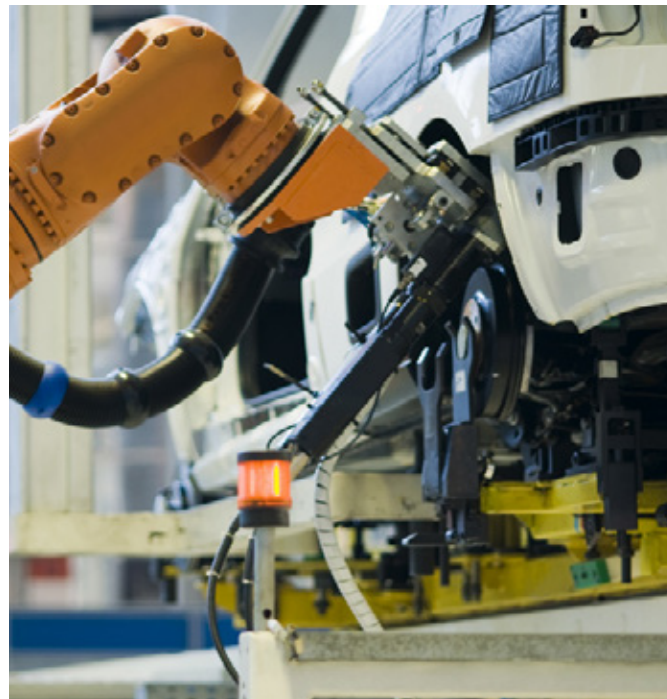
Let's connect.

Electronic interface technology



# Remote I/O

2016/2017



# Smooth machine start-up

## thanks to seamless integrated remote I/O systems

Your I/O technology can be smoothly integrated in your usual engineering system with modules which adapt to your individual circumstances and are quick to get up and running.

Whether you opt for the IP67 version directly on the panel or in the cabinet in an IP20 housing, I/O systems from Weidmüller enable wireless integration in existing programming environments. Intelligent functions mean you are ready instantly.

With your practical equipment, our remote I/O systems optimise your machines and processes. Let's connect.

**More Performance. Simplified. u-remote.**

### IP20



**A.1** **Modular, small and flexible:**  
u-remote IP20

### IP67



**B.1** **Robust, powerful and communicative:**  
u-remote IP67

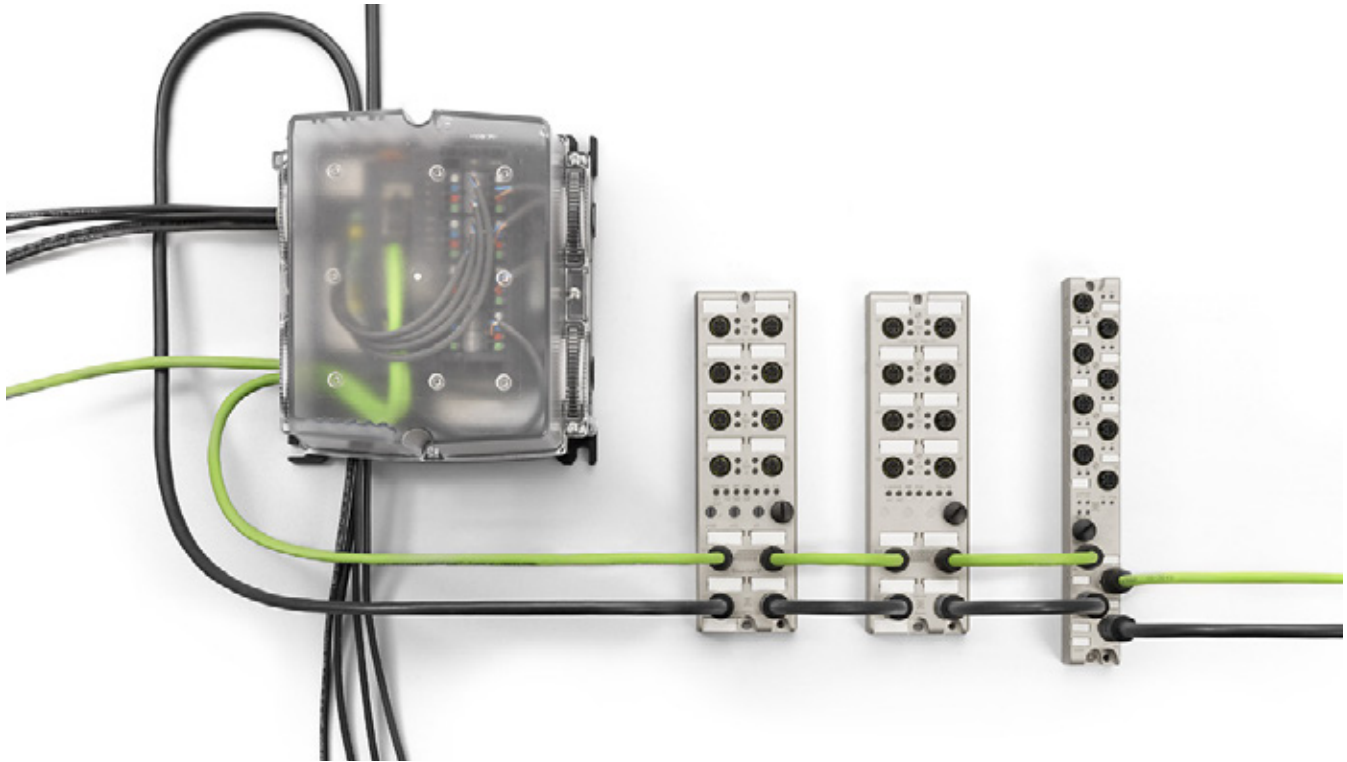


# Fieldbus technique in IP20 and IP67

## The Weidmüller Remote I/O Family

IP20

A



**With u-remote, we have the right solution for each application!**

### The Weidmüller Remote I/O solution

u-remote is suitable for almost any application, no matter what conditions you meet!

The IP20 system for control cabinets offers a wide range of functionalities up to SIL 3 capable modules. By a subbus communication module Weidmüller IP67 subbus modules are directly integrated. Fieldbus networks between IP20 coupler and IP67 stand-alone modules (as shown in the picture above) or completely decentralized IP67 approach- We like to support you to find the best solution for your application!

### Fieldbus flexibility

Other customer- other field bus? Then you are perfectly positioned with u-remote!

u-remote IP20 offers a wide range with 7 fieldbuses - when the fieldbus changes only the coupler have to be replaced, the system structure remains completely- with up to 64 modules!

With the multi-protocol modules in u-remote IP67 you can choose between PROFINET or EtherNet/IP. Simply select the fieldbus by a rotary switch!

### Form factor

u-remote IP20 is with 11.5 mm module width and with up to 32 ports per module not only the narrowest system on the market but also the one with the highest channel density! Equivalently, also u-remote in IP67 has comparatively particularly small dimensions. Module width of 30 mm and 60 mm makes you more flexible in selecting the installation areas.

### Maximum Energy in the System

u-remote IP20 offers two separate Power paths- one for inputs and one for outputs- each with 10 A, thus saving power-feed modules and space.

By the L-coded plugs of the IP67 modules, a power feed with up to 16 A is possible. It enables a greater number of consumers which are wired in a line, thus reducing the amount of wiring and the range considerably.



# IP20

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# You automate high-performance machines and production lines u-remote generates maximum efficiency in your projects

You want to perform your machine development operations – from the automation concept to the stable machine operation – in such a way that they are fast, high-performance, smooth and deliver identifiable added value for your customers. The decisive factors for your project’s success are consistently efficient processes and unique functions.

With u-remote you’re laying the foundation for this. By implementing powerful and easy-to-use signal connection components, you will reap early on the advantages for installation work, machine commissioning and subsequent service applications at your customers’ premises.

From planning to operation, u-remote allows you to speed up all processes and opens up new possibilities for intelligent system architecture. The result available to you is an innovative I/O system which is the perfect response to growing complexity in machine and factory automation thanks to its powerful flexibility and simple handling.

Our formula:  
“More Performance. Simplified. u-remote.”



### Innovative functions for more efficient automation solutions

With u-remote, Weidmüller has completely rethought the I/O technology for IP20 environments. You can thus expect a system that is full of clever details and allows you to install innovative, cost-saving and easy-to-handle automation solutions in your project.

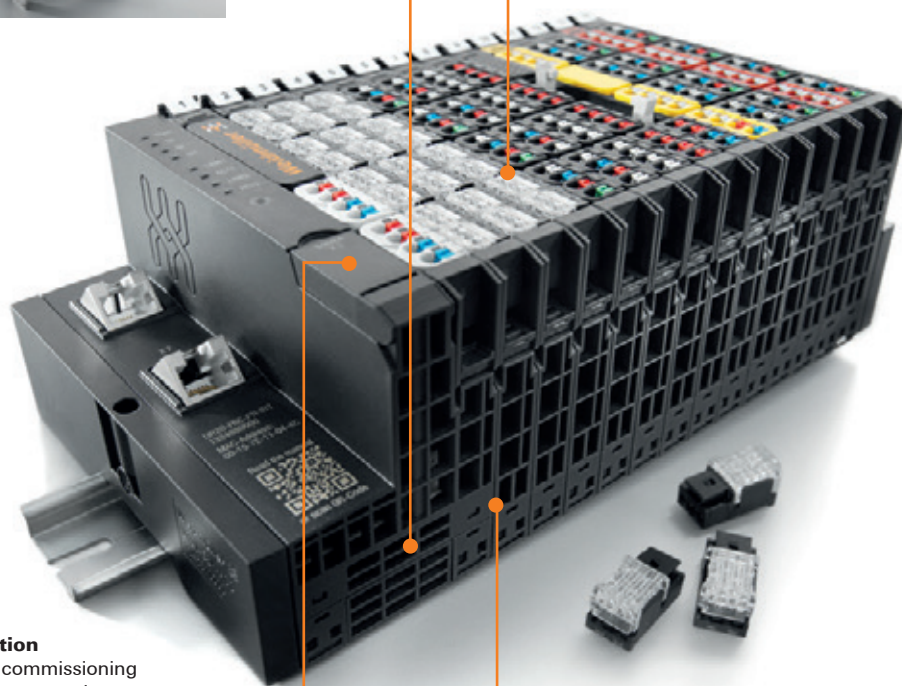


**Why waste space?**

Design your cabinets one size smaller: u-remote, with the highest connection density on a module, offers you the most slender module width and a far lower space requirement for power-feed modules - an unrivaled channel density and extremely flexible design options.

**Simply plug and go**

The plug-in connection level allows sensors and actuators to be connected with pre-assembled cables. This means improved time benefits, better handling, and minimises the number of mistakes in system wiring. Decentralised automation modules in particular are so very easy to transfer into productive operation.

**Diagnostics, even without a control connection**

u-remote simplifies machine commissioning section-by-section and accelerates maintenance work with its integrated web server. Thanks to the high performance diagnostic tool, you can simulate the functionality of inputs and outputs prior to control connection.

You can conduct plain text error analyses using any standard browser - whether you're working on-site or remotely.

**Intelligently separated**

u-remote separates the supply for inputs and outputs using two 10 A current paths which are able to withstand high loads. High productivity translates into fewer power-feed modules and therefore more space and less planning. And your system can be quickly maintained while retaining full diagnostic capability, as inputs and outputs can be switched off independently of one another.





# Achieving higher productivity is so easy

## u-remote combines powerful technologies with efficient processes

### Zero errors with greater performance

The clearly structured single-row connection strip assists with assignment to the circuit diagrams. Especially when working to tight deadlines, this prevents wiring mistakes and problems during service work.

Unique: The innovative HD modules with 32 ports allow for connection of 8 individually pluggable 4-wire sensors.



### Improve system availability

The system simply runs on and on. The permanent base allows electronics to be replaced without interrupting communication, or the supply of voltage to your remote I/O system. A reliable solution for minimising machine downtime.



### Extremely fast with huge power reserves

The u-remote has outstanding electronic performance, with the high-speed system bus achieving up to 256 DI/DOs in 20 µs. u-remote offers an extremely fast response time and precise mapping of processes in the system, with up to 1024 I/O channels per station, as well as huge power reserves for future use.



### One glance and you can see everything going on

Clear assignment of status and diagnosis has never been this simple. With one LED on the channel and status displays on each module, you can easily see all you need on u-remote. The technician can see and rectify errors without delay. Indispensable benefits for a safe start-up and rapid system maintenance.



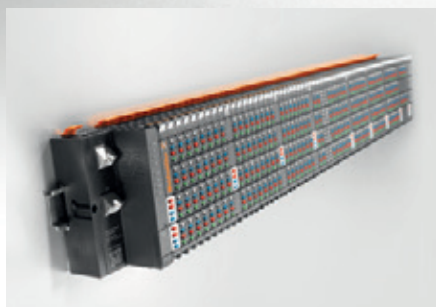
### Direct insertion – direct savings

u-remote is equipped with "PUSH IN" direct connection technology. The conductor with wire end ferrule is simply inserted in the clamping unit until the stop is reached – job done! This technology delivers time savings of up to 50 percent, compared to conventional wire-connection methods, and without losses on safety.



### A single power supply is enough

Keep your remote I/O station as small as possible and simplify your planning. u-remote has a 4 A supply path, which allows 64 I/O modules to be operated with just one power supply on the coupler.



### Speed things up with modularity

The modular structure of u-remote ensures rapid start-up and simple service. The compact design enables intuitive handling which reduces wiring mistakes and therefore lessens the start-up times for machines and systems. u-remote speeds up the replacement of electronics without the need to alter wiring during maintenance work, so improving system availability.



# More Performance. Simplified. u-remote.

IP20

A



Let's connect.



# IP20

u-remote from Weidmüller is the reliable interface between field bus and field level in automation. The modular system is based on various components: a field bus coupler, up to 64 I/O modules, optional power-feed modules and a wealth of accessories, such as markers and terminating elements.

The field bus coupler is the central link between the various field bus standards and the u-remote system bus. At the same time, up to 64 I/O modules are supplied via its integrated power contacts. The well-engineered technology of the connection system enables 2 x 10 A to be supplied for the input and output modules and the system voltage to be fully supplied through the field bus coupler.

Every field bus coupler provides direct access to the u-remote system via a web server without additional software having to be installed. This means that the system can be parameterised and its configuration checked. Inputs and outputs can also be checked or influenced. The connection may take the form of an Ethernet-based field bus or micro USB.

The u-remote field bus couplers are integrated in the standard simple manner. The corresponding development environments of the control systems and the device description files available online, e.g. GSD, ESD, EDS oder XML, can be used to easily perform the necessary settings.

The modularly structured I/O modules are unique in that they allow the sensor and actuator wiring to be designed in both a robust and plug-in manner. This allows the electronics to be replaced at any time even with permanent wiring without downstream I/O module operations being affected. This achieves an invaluable time saving, in terms of both wiring inaccessible cabinets and rapidly replacing sensors. Thanks to the "PUSH IN" technology for up to 1.5 mm<sup>2</sup>, in their narrowest form of 11.5 mm, the modularly structured u-remote I/O modules can be used for all sensor and actuator connections with a very high connection density. A clear status and diagnosis display on the connection also ensures rapid and precise checks for individual sensors and actuators.



# PROFIBUS field bus coupler

DP-V1; Web server tool;  
Sub-D connection



IP20  
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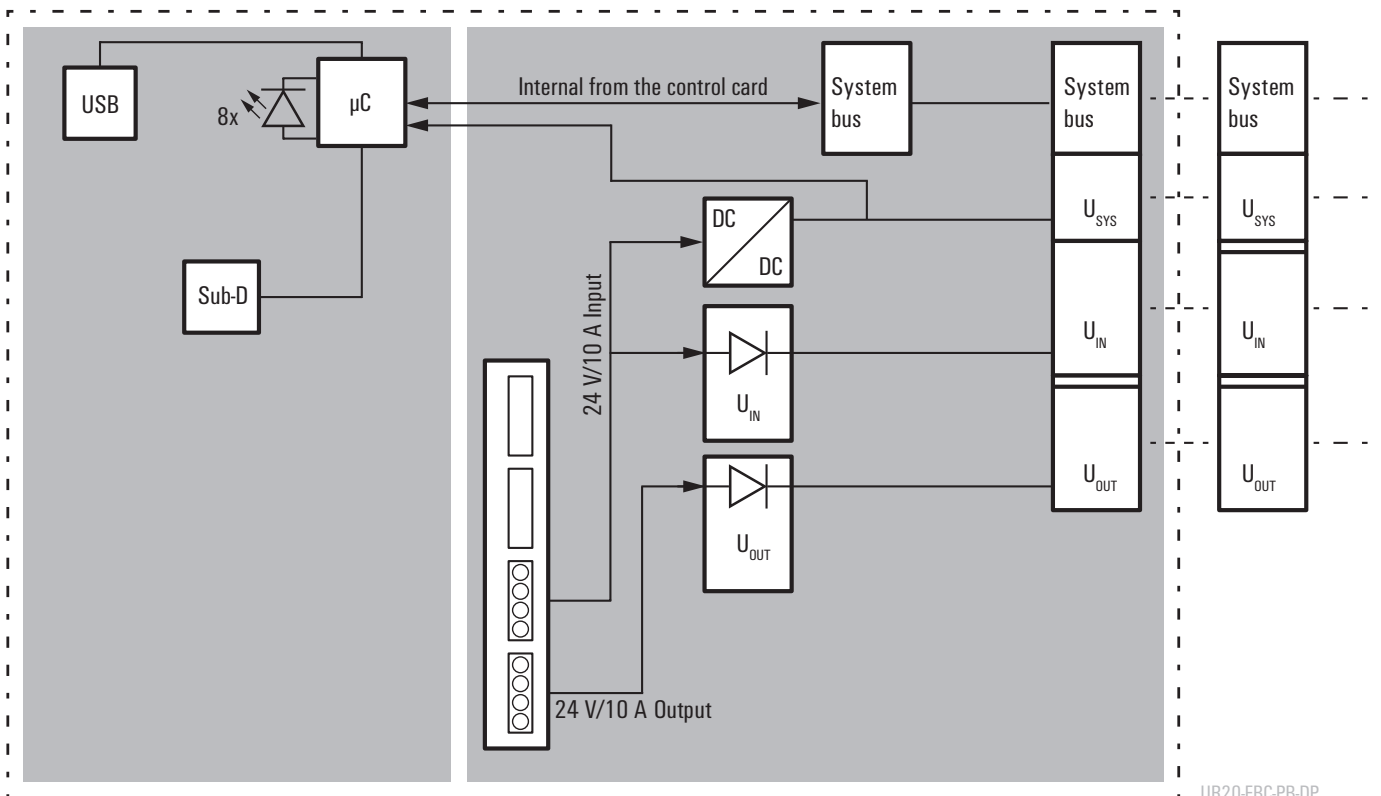
In automation technology, the PROFIBUS-DP standard enables the controlled incorporation of sensors and actuators via one central control unit. The UR20-FBC-PB-DP field bus coupler is a PROFIBUS-DP-V1 participant certified by the Profibus user organisation. With options for connecting up to 64 u-remote participants, it serves as the head module for the u-remote system bus. The PROFIBUS-DP coupler has a Sub-D plug-in connector and supports all services according to the DP-V1 specification. Two rotary coding switches are used to address individual PROFIBUS participants.

The coupler can be activated with a system-independent web server application via the USB service interface. All information, such as diagnoses, status values and parameters, can therefore be read out. All connected inputs can also be simulated or outputs set. The initial system power supply is already integrated in the field bus coupler. Power is supplied via two 4-pin connectors, separated into the input and output current paths.

Since the PROFIBUS-DP products from Weidmüller make full use of all the latest technological possibilities, such as GSD files and diagnosis messages, they actively support your application in the most important tasks – from engineering and commissioning fault diagnosis.

More Performance. Simplified.

**Block diagram UR20-FBC-PB-DP**



UR20-FBC-PB-DP

**PROFIBUS**

- 2 x 10 A current paths
- Address can be set using rotary switch
- Web server
- System supply of 64 I/O modules
- Temperature range -20... +60 °C
- PROFIBUS DP-V1 up to 12 Mbaud

**UR20-FBC-PB-DP**



**Technical data**

System data	
Connection	9-pin SUB-D connector
Field bus protocol	PROFIBUS DP-V1
Process data	488 Bytes
Parameter data	244 Bytes
Diagnostic data	244 Bytes
Max. number of I/O modules	64
Configuration interface	Micro USB 2.0
Transmission rate of field bus	12 Mbps
Transmission speed of u-remote system bus	48 Mbps
Supply	
Supply voltage for system and inputs	24 V DC +20 % / -15 %
Supply voltage for outputs	24 V DC +20 % / -15 %
Feed current for input modules, max.	10 A
Feed current for output modules, max.	10 A
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	100 mA
General data	
Weight	220 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 52 mm x 76 mm
Note	
Download of GSD-file on <a href="http://www.weidmueller.com">www.weidmueller.com</a>	

**Ordering data**

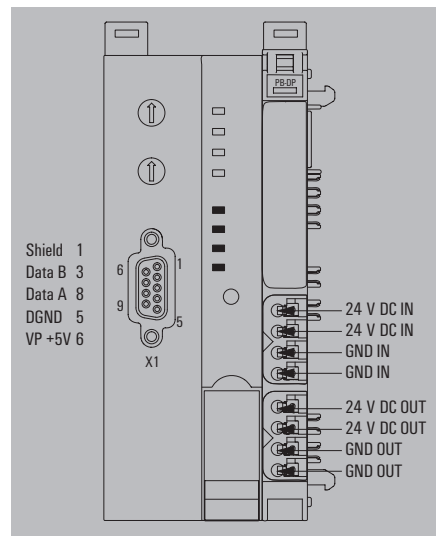
Module variants	
Field bus coupler, PROFIBUS DP-V1	
Note	
A termination kit (UR20-EBK-ACC) is included in the coupler package	

**Accessories**

Type	Qty.	Order No.
Coding elements	100	1483050000
Termination kit	5	1346610000
Swivel marker	20	1339920000
Connection marker for pusher custom printing	192	1323700000
Connection marker for pusher neutral	960	1323710000
Module marker for custom printing	100	1341610000
Module marker for neutral	500	1341630000
Thermotransfer version (Material: Polyester)	1	1429910000
Thermotransfer version (Material: Polyester)	1	1429420000
Paper version for Laserprinter	10	1429430000
USB cable (USB A to Micro USB)	1	1487980000
Replacement parts		
Plug-in connector unit	5	1361520000
Note		
* <sup>1</sup> ) 1 roll = 1000 label = 1 Qty.		
* <sup>2</sup> ) 1 sheet = 60 label = 1 Qty.		

Type	Qty.	Order No.
UR20-FBC-PB-DP	1	1334870000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDRVPE	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1</sup> )	1	1429910000
THM UR20 WS * <sup>1</sup> )	1	1429420000
ESD UR20 DIN A4 WS * <sup>2</sup> )	10	1429430000
IE-C6FP8LE0015M40M40-E	1	1487980000
UR20-PK-1334870000-SP	5	1361520000



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1334870000



Let's connect.



# PROFINET field bus coupler

Web server tool;  
two RJ45 ports; 100 Mbps



IP20  
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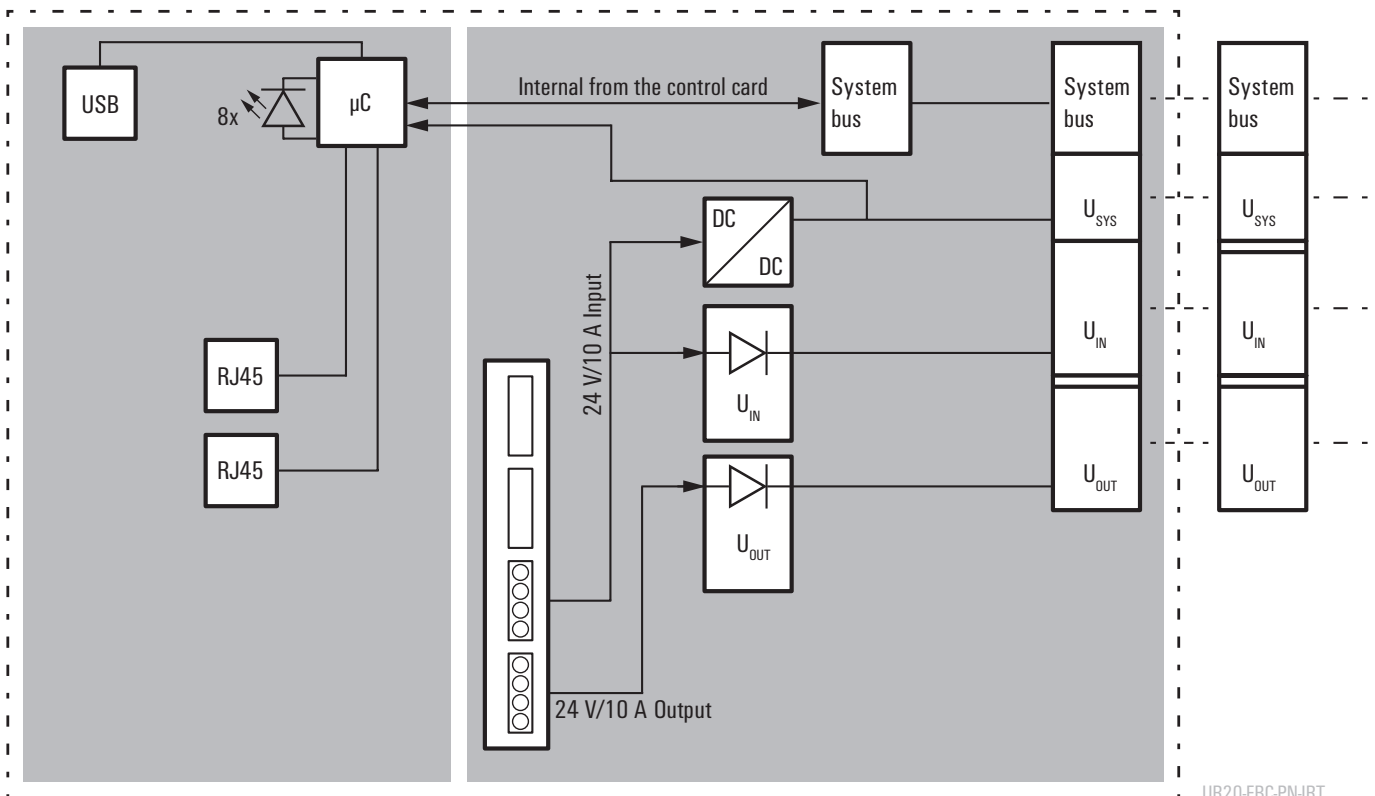
PROFINET is gaining in importance as a rapidly growing Industrial Ethernet Standard. By supporting real-time functionality (RT) and isochronous real-time functionality (IRT), the technology complies with modern system and application requirements to a large extent. The UR20-FBC-PN-IRT field bus coupler is a PROFINET-IRT participant certified by the PROFIBUS user organisation. It is able to connect up to 64 u-remote participants and two Ethernet ports with integrated switch to implement a line network structure.

The coupler can be activated with a system-independent web server application via the USB service interface or the Ethernet ports. All information, such as diagnoses, status values and parameters, can therefore be read out. All connected inputs can also be simulated or outputs set. The initial system power supply is already integrated in the field bus coupler. Power is supplied via two 4-pin connectors, separated into the input and output current paths.

Since the PROFINET products from Weidmüller make full use of all the latest technological possibilities, such as GSDML files and diagnosis messages, they actively support your application in the most important tasks – from engineering and commissioning to faults.

More Performance. Simplified.

**Block diagram UR20-FBC-PN-IRT**



UR20-FBC-PN-IRT

**PROFINET**

- 2 x 10 A current paths
- Web server
- System supply of 64 I/O modules
- Temperature range -20... +60 °C
- PROFINET IRT/RT capable
- PROFINET diagnosis
- LLDP - Neighborhood detection

**UR20-FBC-PN-IRT**



**Technical data**

System data	
Connection	2 x RJ-45
Field bus protocol	PROFINET IO (RT/IRT)
Process data	1.024 Bytes
Parameter data	1.485 Bytes
Diagnostic data	1.485 Bytes
Fast startup	yes
Max. number of I/O modules	64
Configuration interface	Micro USB 2.0
Transmission rate of field bus	100 Mbps
Transmission speed of u-remote system bus	48 Mbps
Supply	
Supply voltage for system and inputs	24 V DC +20 % / -15 %
Supply voltage for outputs	24 V DC +20 % / -15 %
Feed current for input modules, max.	10 A
Feed current for output modules, max.	10 A
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	116 mA
General data	
Weight	220 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 52 mm x 76 mm
<b>Note</b>	Download of GSDML-file on <a href="http://www.weidmueller.com">www.weidmueller.com</a>

Type		
Type	Qty.	Order No.
UR20-FBC-PN-IRT	1	1334880000
A termination kit (UR20-EBK-ACC) is included in the coupler package		

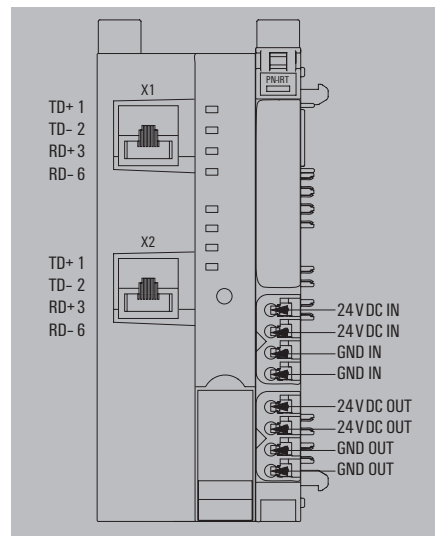
**Ordering data**

Module variants	
Field bus coupler, PROFINET IRT	
<b>Note</b>	

**Accessories**

Type	
Coding elements	KOSM BHZ5.00
Termination kit	UR20-EBK-ACC
Swivel marker	UR20-SM-ACC
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS
Module marker for custom printing	DEK 5/8-11.5 MC SDR
Module marker for neutral	DEK 5/8-11.5 MC NE WS
Thermotransfer version (Material: Polyester)	THM UR20 GE * <sup>1)</sup>
Thermotransfer version (Material: Polyester)	THM UR20 WS * <sup>1)</sup>
Paper version for Laserprinter	ESO UR20 DIN A4 WS * <sup>2)</sup>
USB cable (USB A to Micro USB)	IE-C6FP8LE0015M40M40-E
Replacement parts	
Plug-in connector unit	UR20-PK-1334880000-SP
<b>Note</b>	

Type		
Type	Qty.	Order No.
UR20-FBC-PN-IRT	1	1334880000
A termination kit (UR20-EBK-ACC) is included in the coupler package		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1334880000



Let's connect.

# EtherCAT field bus coupler

Web server tool;  
two RJ45 ports; 10/100 Mbps



IP20  
A

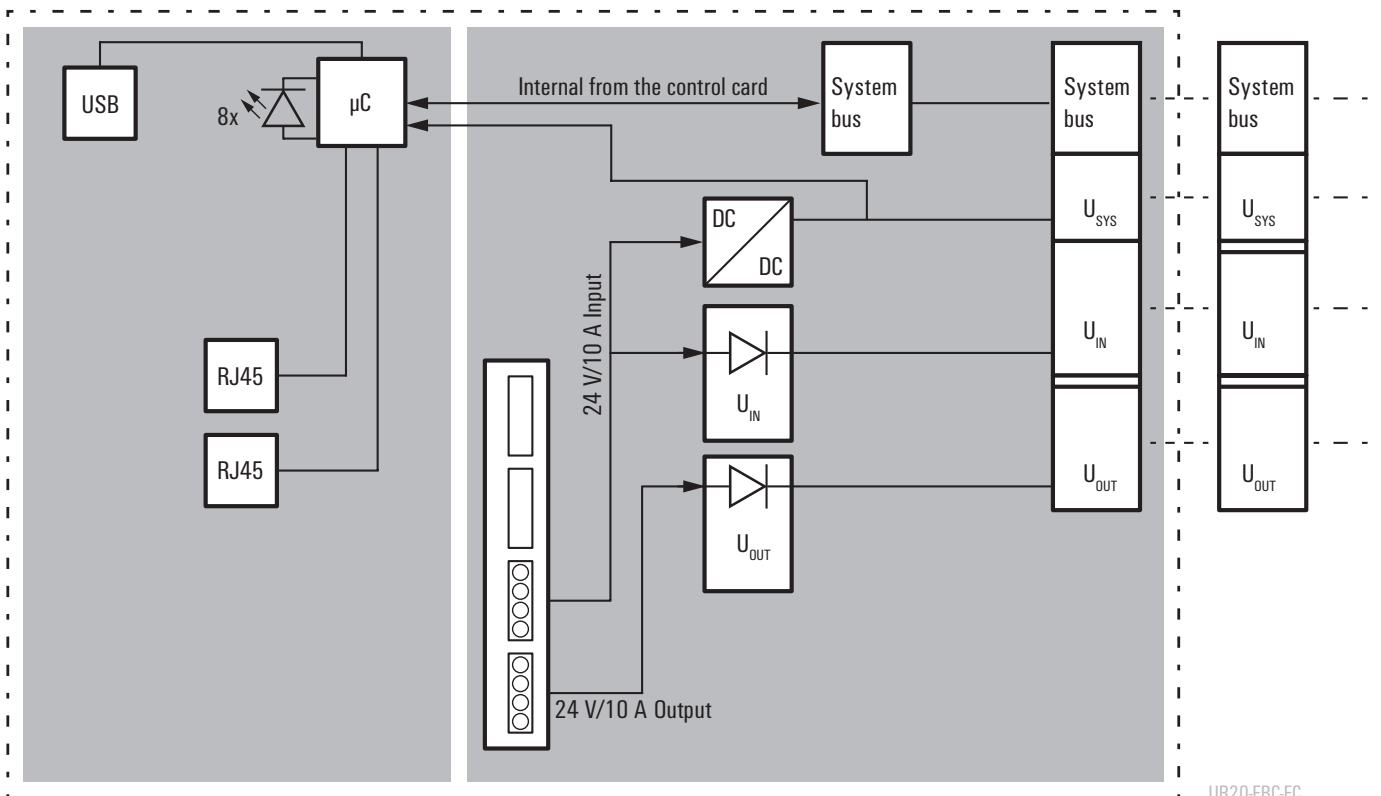
EtherCAT is a popular field bus standard for systems with stringent time requirements. The UR20-FBC-EC field bus coupler is an EtherCAT participant certified by the EtherCAT Technology Group. With options for connecting up to 64 u-remote participants, it serves as the head module for the u-remote system bus. The EtherCAT coupler has two Ethernet ports with integrated switch for implementing a line network structure.

The coupler can be activated with a system-independent web server application via the USB service interface or the Ethernet ports. All information, such as diagnoses, status values and parameters, can therefore be read out. All connected inputs can also be simulated or outputs set. The system's initial power supply is already integrated in the field bus coupler. Power is supplied via two 4-pin connectors, separated into the input and output current paths.

Since the EtherCAT products from Weidmüller make full use of all the latest technological possibilities, such as use of XML files, they actively support your application in the most important tasks – from engineering and commissioning to fault diagnosis.

More Performance. Simplified.

### Block diagram UR20-FBC-EC



UR20-FBC-EC

**EtherCAT**

- 2 x 10 A current paths
- Web server
- System supply of 64 I/O modules
- Temperature range -20... +60 °C
- Various EtherCAT services

**UR20-FBC-EC**



**Technical data**

System data	
Connection	2 x RJ-45
Field bus protocol	EtherCAT
Process data	1024 Byte
Parameter data	64 x 64 = 4KB
Diagnostic data	64 x 50 Bytes
Max. number of modules	64
Configuration interface	Micro USB 2.0
Transmission rate of field bus	100 Mbps
Transmission speed of u-remote system bus	48 Mbps
Supply	
Supply voltage for system and inputs	24 V DC +20 % / -15 %
Supply voltage for outputs	24 V DC +20 % / -15 %
Feed current for input modules, max.	10 A
Feed current for output modules, max.	10 A
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	130 mA
General data	
Weight	220 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 52 mm x 76 mm
Note	
Download of ESI-file on <a href="http://www.weidmueller.com">www.weidmueller.com</a>	

**Ordering data**

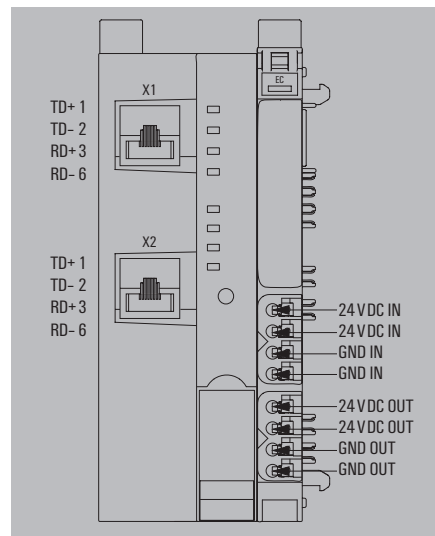
Module variants	
Field bus coupler, EtherCAT	
Note	

**Accessories**

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
USB cable (USB A to Micro USB)	
Replacement parts	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
UR20-FBC-EC	1	1334910000
A termination kit (UR20-EBK-ACC) is included in the coupler package		

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
IE-C6FP8LE0015M40M40-E	1	1487980000
UR20-PK-1334910000-SP	5	1484440000
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty. * <sup>2)</sup> 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1334910000



Let's connect.



# ModbusTCP field bus coupler

Web server tool;  
two RJ45 ports; 10/100 Mbps



IP20  
A

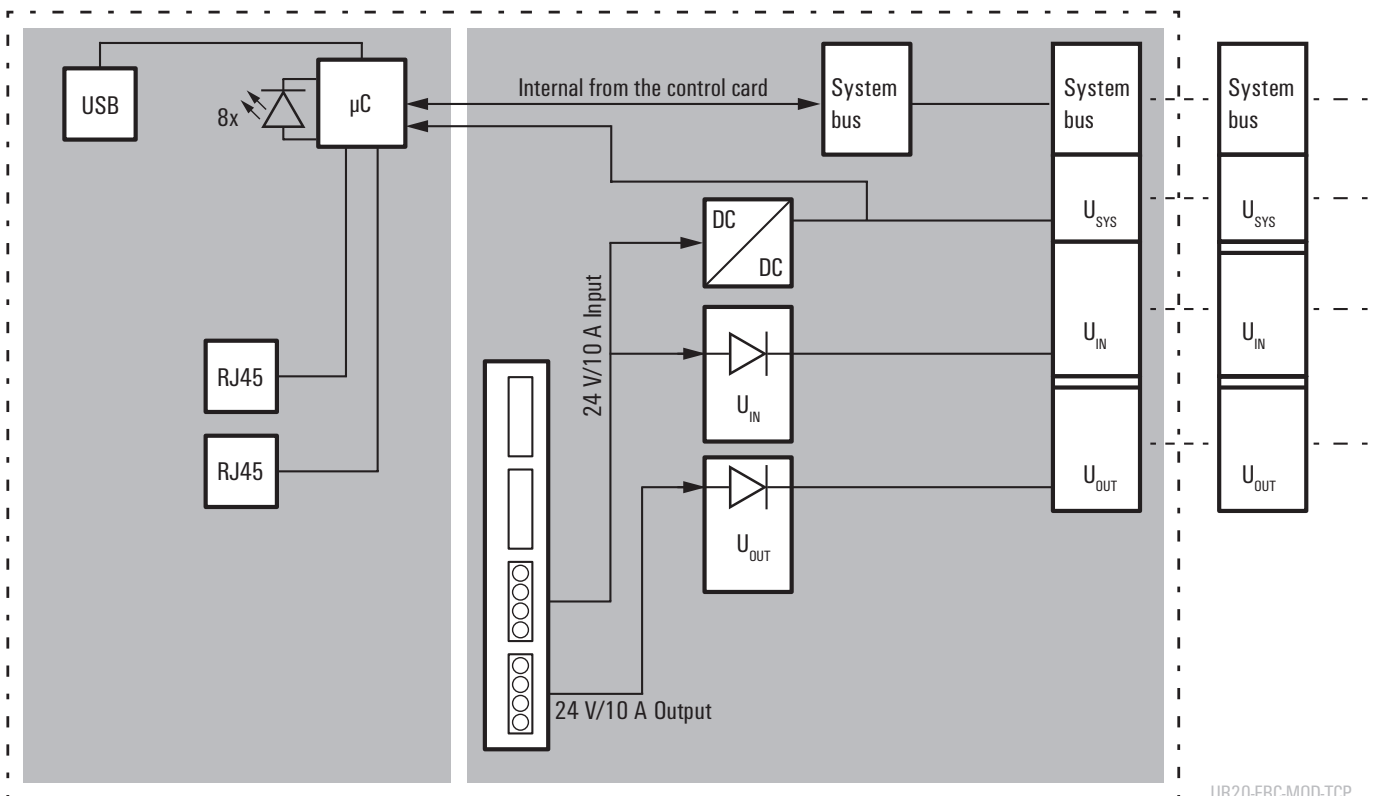
System safety around the globe is provided by the ModbusTCP version, which is stated in IEC 61158 as an Industrial Ethernet Standard. The UR20-FBC-MOD-TCP from Weidmüller is a field bus coupler designed in accordance with IEC 61158. With options for connecting up to 64 u-remote participants, it serves as the head module for the u-remote system bus.

The coupler can be activated with a system-independent web server application via the USB service interface or the Ethernet ports. All information, such as diagnoses, status values and parameters, can therefore be read out. All connected inputs can also be simulated or outputs set. The system's initial power supply is already integrated in the field bus coupler. Power is supplied via two 4-pin connectors, separated into the input and output current paths.

Since the ModbusTCP products from Weidmüller make full use of all the latest technological possibilities, such as diagnosis options, they actively support your application in the most important tasks – from engineering and commissioning to fault diagnosis.

More Performance. Simplified.

### Block diagram UR20-FBC-MOD-TCP



UR20-FBC-MOD-TCP

**ModbusTCP**

- 2 x 10 A current paths
- Various Modbus services
- Web server
- System supply of 64 I/O modules
- Temperature range -20... +60 °C

**UR20-FBC-MOD-TCP**



**Technical data**

System data	
Connection	2 x RJ-45
Field bus protocol	Modbus TCP
Process data	8 kBytes
Parameter data	1.024 Bytes
Diagnostic data	1.024 Bytes
Max. number of modules	64
Configuration interface	Micro USB 2.0
Transmission rate of field bus	100 Mbps
Transmission speed of u-remote system bus	48 Mbps
Supply	
Supply voltage for system and inputs	24 V DC +20 % / -15 %
Supply voltage for outputs	24 V DC +20 % / -15 %
Feed current for input modules, max.	10 A
Feed current for output modules, max.	10 A
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	112 mA
General data	
Weight	220 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 52 mm x 76 mm

Connection	2 x RJ-45
Field bus protocol	Modbus TCP
Process data	8 kBytes
Parameter data	1.024 Bytes
Diagnostic data	1.024 Bytes
Max. number of modules	64
Configuration interface	Micro USB 2.0
Transmission rate of field bus	100 Mbps
Transmission speed of u-remote system bus	48 Mbps
Supply	
Supply voltage for system and inputs	24 V DC +20 % / -15 %
Supply voltage for outputs	24 V DC +20 % / -15 %
Feed current for input modules, max.	10 A
Feed current for output modules, max.	10 A
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	112 mA
General data	
Weight	220 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 52 mm x 76 mm

**Ordering data**

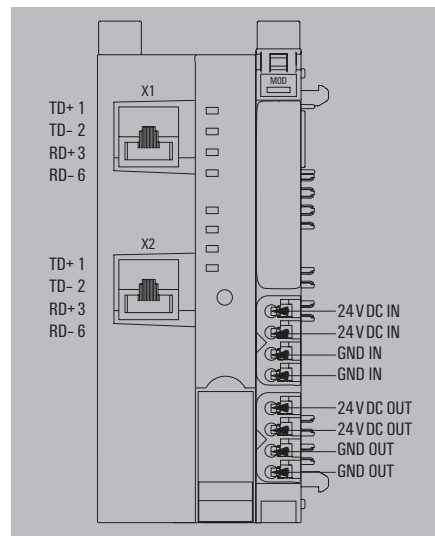
Module variants	
Field bus coupler, Modbus TCP	
Note	

Type	Qty.	Order No.
UR20-FBC-MOD-TCP	1	1334930000
A termination kit (UR20-EBK-ACC) is included in the coupler package		

**Accessories**

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
USB cable (USB A to Micro USB)	
Replacement parts	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
IE-C6FP8LE0015M40M40-E	1	1487980000
UR20-PK-1334930000-SP	5	1484130000
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty.		
* <sup>2)</sup> 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1334930000



Let's connect.

# EtherNet/IP field bus coupler

Web server tool;  
two RJ45 Ports; 100 Mbps

IP20  
A

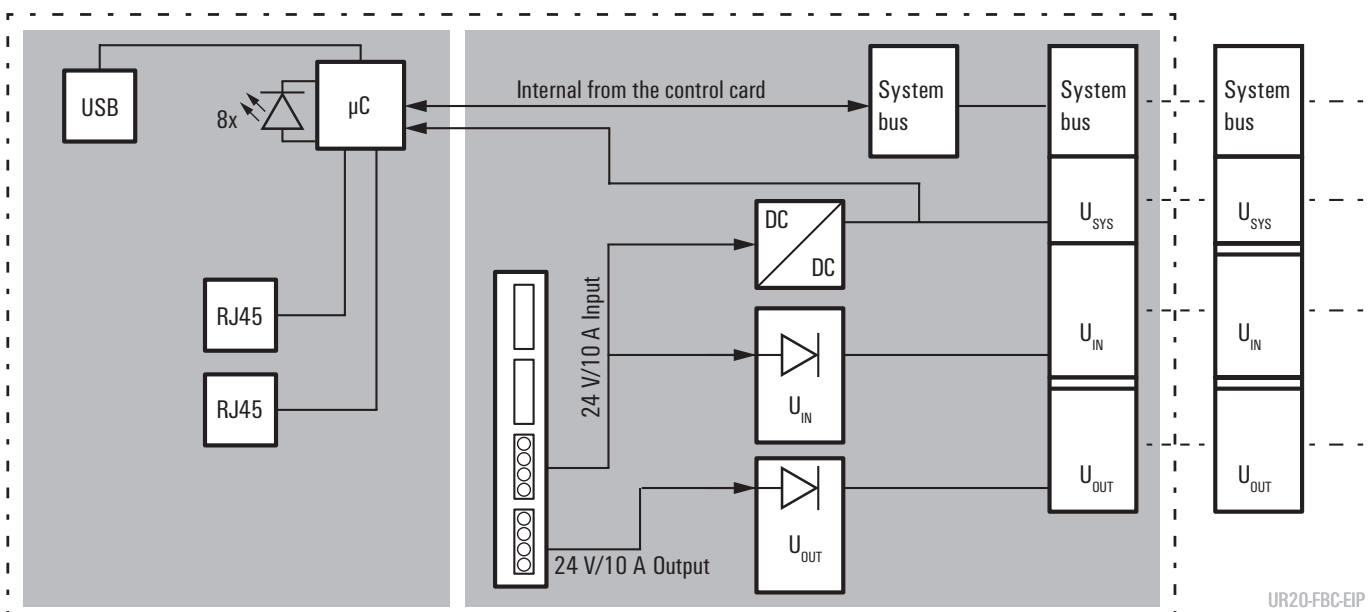
EtherNet/IP™ is a widespread, real-time capable Industrial Ethernet fieldbus system. It is based on standard Ethernet technology such as TCP and UDP so it provides in addition to the transmission of unicast messages between two participants, the possibility of sending I/O data via multicast cyclically to multiple recipients. The UR20-FBC-EIP from Weidmüller is a field bus coupler designed in accordance with IEC 61158 and is an EtherNet/IP participant. With options for connecting up to 64 u-remote participants, it serves as the head module for the u-remote system bus.

The coupler can be activated with a system-independent web server application via the USB service interface or the Ethernet ports. All information such as diagnoses, status values and parameters can therefore be read out. All connected inputs can also be simulated or outputs set. The system's initial power supply is already integrated in the field bus coupler. Power is supplied via two 4-pin connectors, separated into the input and output current paths.

Since the EtherNet/IP products from Weidmüller make full use of all the latest technological possibilities, such as diagnosis options, they actively support your application in the most important tasks – from engineering and commissioning to fault diagnosis.

More Performance. Simplified.

### Block diagram UR20-FBC-EIP



**EtherNet/IP**

- 2 x 10 A current paths
- Web server
- System supply of 64 I/O modules
- Temperature range -20... +60 °C

**UR20-FBC-EIP**



**Technical data**

<b>System data</b>	
Connection	2 x RJ-45
Field bus protocol	Ethernet/IP
Process data	max. 2*494 Byte
Parameter data	max. 64*64 Byte
Diagnostic data	max. 64*47 Byte
Max. number of I/O modules	64
Configuration interface	Micro USB 2.0
Transmission rate of field bus	100 Mbps
Transmission speed of u-remote system bus	48 Mbps
<b>Supply</b>	
Supply voltage for system and inputs	24 V DC +20 % / -15 %
Supply voltage for outputs	24 V DC +20 % / -15 %
Feed current for input modules, max.	10 A
Feed current for output modules, max.	10 A
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	112 mA
<b>General data</b>	
Weight	220 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 52 mm x 76 mm
<b>Note</b>	

<b>System data</b>		
Connection	2 x RJ-45	
Field bus protocol	Ethernet/IP	
Process data	max. 2*494 Byte	
Parameter data	max. 64*64 Byte	
Diagnostic data	max. 64*47 Byte	
Max. number of I/O modules	64	
Configuration interface	Micro USB 2.0	
Transmission rate of field bus	100 Mbps	
Transmission speed of u-remote system bus	48 Mbps	
<b>Supply</b>		
Supply voltage for system and inputs	24 V DC +20 % / -15 %	
Supply voltage for outputs	24 V DC +20 % / -15 %	
Feed current for input modules, max.	10 A	
Feed current for output modules, max.	10 A	
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	112 mA	
<b>General data</b>		
Weight	220 g	
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 52 mm x 76 mm	
<b>Note</b>		
Download of EDS-file on <a href="http://www.weidmueller.com">www.weidmueller.com</a>		

**Ordering data**

<b>Module variants</b>	
Field bus coupler, EtherNet/IP	
<b>Note</b>	

Type	Qty.	Order No.
UR20-FBC-EIP	1	1334920000

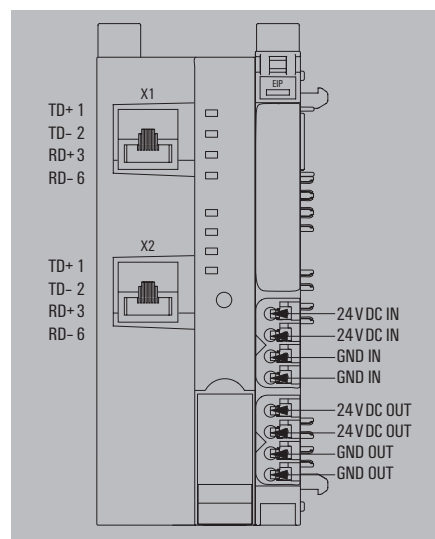
A termination kit (UR20-EBK-ACC) is included in the coupler package

**Accessories**

<b>Accessories</b>	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
USB cable (USB A to Micro USB)	
<b>Replacement parts</b>	
Plug-in connector unit	
<b>Note</b>	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
IE-C6FP8LE0015M40M40-E	1	1487980000
<b>Replacement parts</b>		
UR20-PK-1334920000-SP	5	1541290000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1334920000



Let's connect.



# DeviceNet field bus coupler

Web server tool;  
PCB plug-in connector

IP20  
A

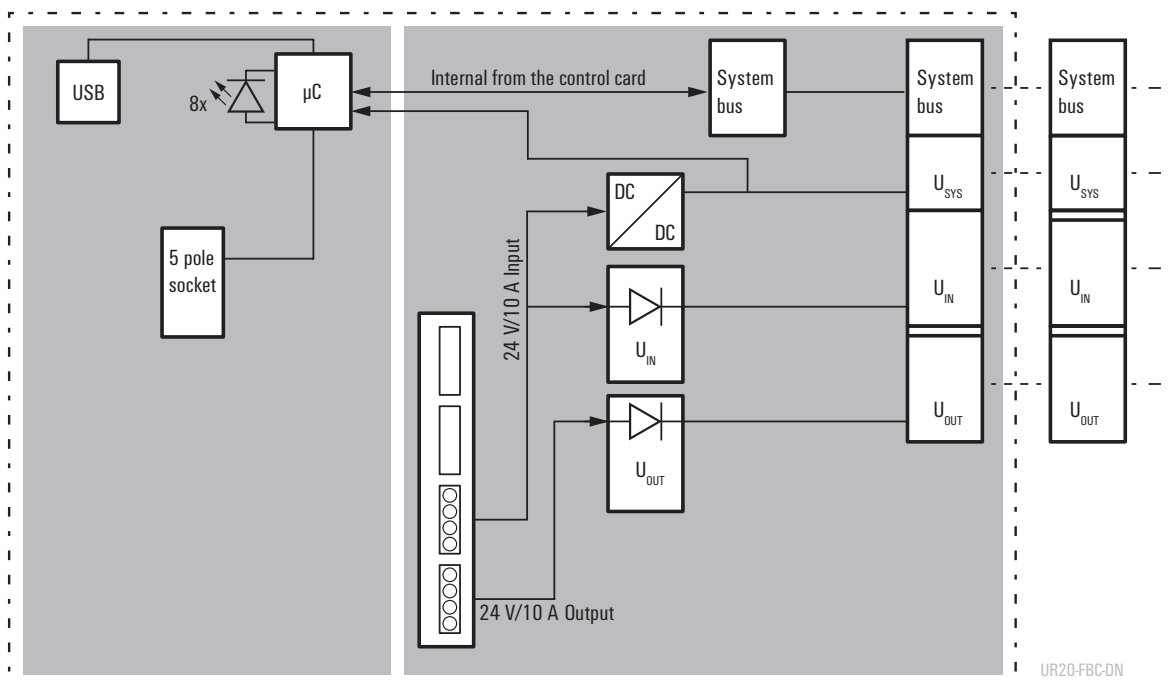
DeviceNet is a serial, CAN-based fieldbus system, which was developed by Allen-Bradley and later on passed as an open standard to the ODVA (Open DeviceNet Vendor Association). Today it is used worldwide in automation technology. Classical can DeviceNet operated with a maximum of 64 network nodes per fieldbus segment. The fieldbus coupler UR20-FBC-DN is connected via a 5-pin PCB connector to the network. With options for connecting up to 64 u-remote participants, it serves as the head module for the u-remote system bus.

The coupler can be activated with a system-independent web server application via the USB service interface. All information, such as diagnoses, status values and parameters, can therefore be read out. All connected inputs can also be simulated or outputs set. The initial system power supply is already integrated in the field bus coupler. Power is supplied via two 4-pin connectors, separated into the input and output current paths.

Since the DeviceNet products from Weidmüller make full use of all the latest technological possibilities, such as diagnosis options, they actively support your application in the most important tasks – from engineering and commissioning to fault diagnosis.

More Performance. Simplified.

## Block diagram UR20-FBC-DN



**DeviceNet**

- 2 x 10 A current paths
- Web server
- System supply of 64 I/O modules
- Temperature range -20... +60 °C

**UR20-FBC-DN**



**Technical data**

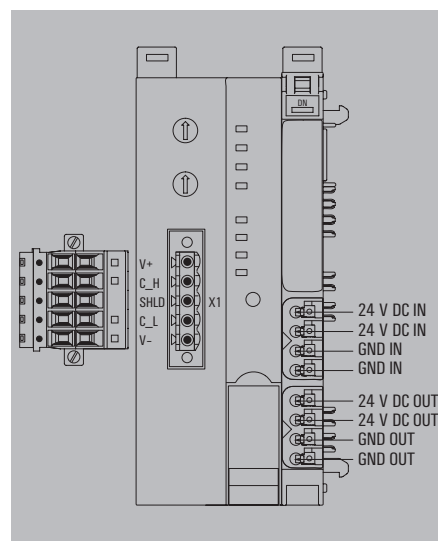
System data	
Connection	Socket for 5-pole PCB plug-in connector
Field bus protocol	DeviceNet
Process data	1008 Byte
Parameter data	64*64 Byte = 4 KB
Diagnostic data	64*47 Byte
Max. number of I/O modules	64
Configuration interface	Micro USB 2.0
Transmission rate of field bus	max. 500 kBit/s
Transmission speed of u-remote system bus	max. 48 Mbps
Supply	
Supply voltage for system and inputs	24 V DC +20 % / -15 %
Supply voltage for outputs	24 V DC +20 % / -15 %
Feed current for input modules, max.	10 A
Feed current for output modules, max.	10 A
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	75 mA (+ 15 mA from DeviceNet supply)
General data	
Weight	225 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 52 mm x 76 mm
Note	
Download of EDS-file on <a href="http://www.weidmueller.com">www.weidmueller.com</a>	

**Ordering data**

Module variants	
Field bus coupler, DeviceNet	
Note	
A termination kit (UR20-EBK-ACC) is included in the coupler package	

**Accessories**

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
IE-C6FP8LE0015M40M40-E	1	1487980000
BLDZ DN5.08/05/180F GY BX PRT	50	1919990000
BLZ DN 5.08/05/180F AU GY BX PRT	50	1933550000
Replacement parts		
Plug-in connector unit	UR20-PK-1334900000-SP	5 2003540000
Note		
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty.		
* <sup>2)</sup> 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1334900000



Let's connect.

# CAN field bus coupler

## Web server tool; Sub-D connection



IP20  
A

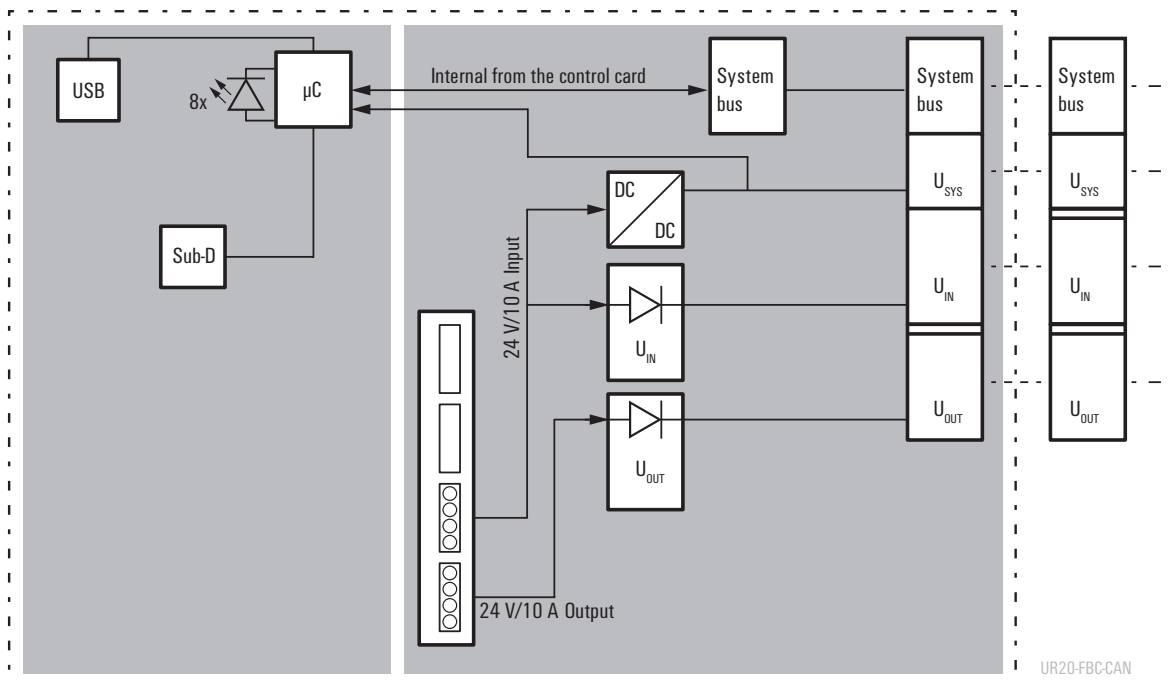
The CAN bus (Controller Area Network) is a serial fieldbus, which was introduced in 1983 by Bosch and Intel. Due to the good characteristics it is particularly suitable for applications where high data security is required. The fieldbus coupler UR20-FBC-CAN uses the CAN based Layer 7 communication protocol CANopen, the device profile CiA DS401 for digital and analog I/O modules is supported. With options for connecting up to 64 u-remote participants, it serves as the head module for the u-remote system bus.

The coupler can be activated with a system-independent web server application via the USB service interface. All information, such as diagnoses, status values and parameters, can therefore be read out. All connected inputs can also be simulated or outputs set. The initial system power supply is already integrated in the field bus coupler. Power is supplied via two 4-pin connectors, separated into the input and output current paths.

Since the CANopen products from Weidmüller make full use of all the latest technological possibilities, such as diagnosis options, they actively support your application in the most important tasks – from engineering and commissioning to fault diagnosis.

More Performance. Simplified.

### Block diagram UR20-FBC-CAN



**CANopen**

- 2 x 10 A current paths
- Web server
- System supply of 64 I/O modules
- Temperature range -20... +60 °C

**UR20-FBC-CAN**



**Technical data**

System data	
Connection	9-pole Sub-D socket
Field bus protocol	CANopen
Process data	488 Byte
Parameter data	244 Byte
Diagnostic data	244 Byte
Max. number of I/O modules	64
Configuration interface	Micro USB 2.0
Transmission rate of field bus	max. 1 Mbps
Transmission speed of u-remote system bus	max. 48 Mbps
Supply	
Supply voltage for system and inputs	24 V DC +20 % / -15 %
Supply voltage for outputs	24 V DC +20 % / -15 %
Feed current for input modules, max.	10 A
Feed current for output modules, max.	10 A
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	90 mA
General data	
Weight	227 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 52 mm x 76 mm
Note	
Download of EDS-file on <a href="http://www.weidmueller.com">www.weidmueller.com</a>	

**Ordering data**

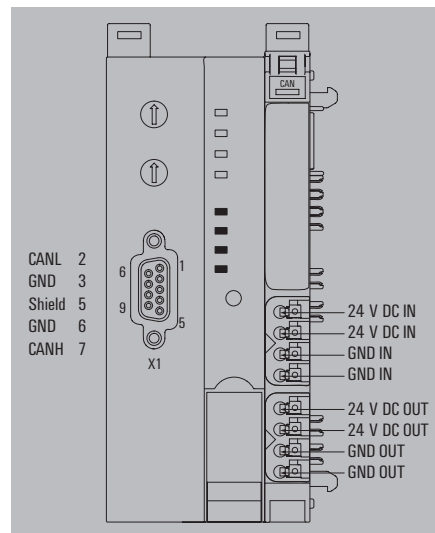
Module variants	
Field bus coupler, CANopen	
Note	
A termination kit (UR20-EBK-ACC) is included in the coupler package	

**Accessories**

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
IE-C6FP8LE0015M40M40-E	1	1487980000
Replacement parts		
UR20-PK-1334890000-SP	5	2003530000
Note		
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty.		
* <sup>2)</sup> 1 sheet = 60 label = 1 Qty.		

Type	Qty.	Order No.
UR20-FBC-CAN	1	1334890000

Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 61010-2-201
MSIP	MSIP-REM-WMG-1334890000



Let's connect.



# Digital input modules

P- or N-switching; Reverse polarity protection, up to 3-wire +FE

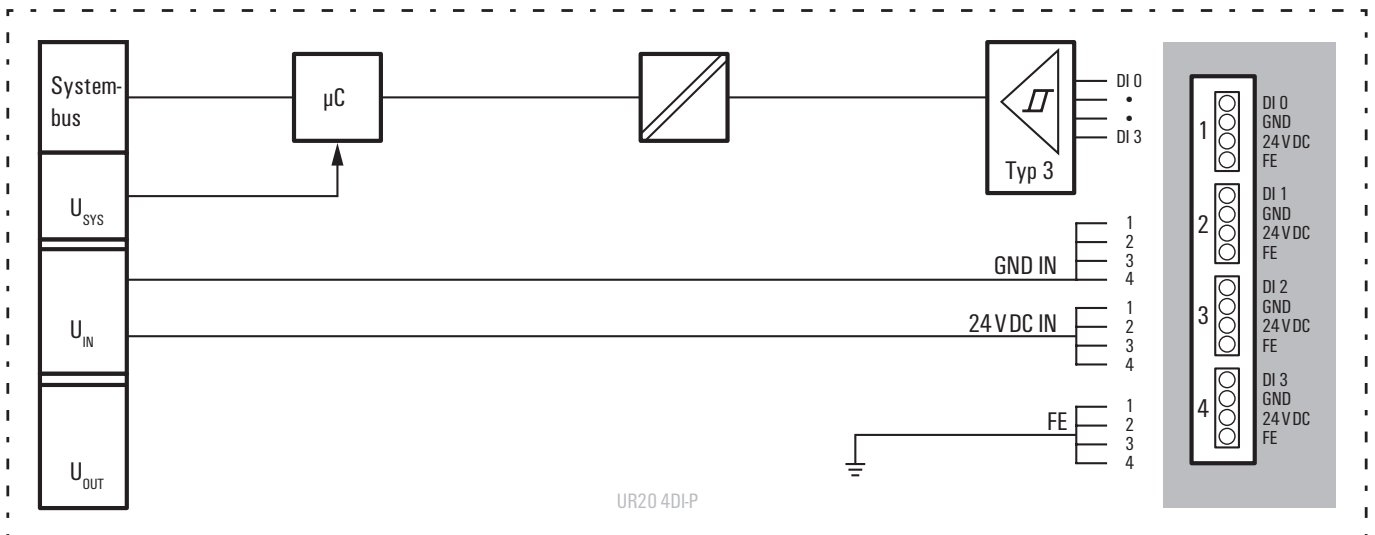
IP20  
A

Digital input modules from Weidmüller are available in different versions and are used primarily to receive binary control signals from sensors, transmitters, switches or proximity switches. Thanks to their flexible design, they will satisfy your need for well co-ordinated project planning with reserve potential.

All modules are available with 4, 8 or 16 inputs and comply fully with IEC 61131-2. The digital input modules are available as P- or N-switching variant. The digital inputs are for Type 1 and Type 3 sensors in accordance with the standard. With a maximum input frequency of up to 1 kHz, they are used in many different applications. The variant for PLC interface units enables rapid cabling to the proven Weidmüller interface sub-assemblies using system cables. This ensures rapid incorporation into your overall system. Two modules with a timestamp function are able to capture binary signals and to provide a timestamp in 1  $\mu$ s resolution. Further solutions are possible with the module UR20-4DI-2W-230V-AC which works with accurate current up to 230 V as an input signal.

The module electronics supply the connected sensors from the input current path ( $U_{IN}$ ).

### UR20-4DI-P block diagram example



4DI-P

- 4 digital inputs for sensors such as transmitters, switches and proximity sensors
- Positive switching
- Reverse polarity protection
- 2-wire, 3-wire, 3-wire+FE connection
- Input filter can be set channel by channel
- Integrated sensor supply
- Types 1 and 3 acc. to IEC 61131-2

UR20-4DI-P



Technical data

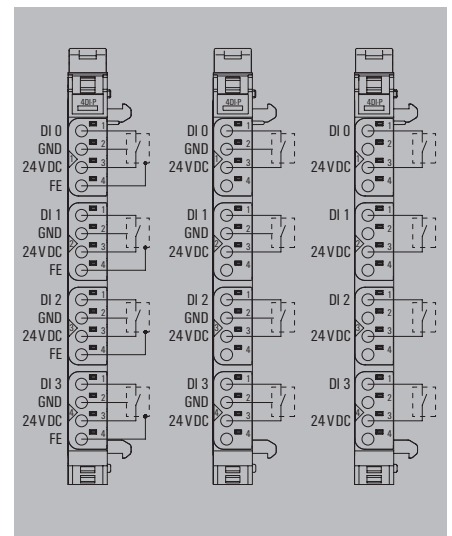
System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	< 12 mA + sensor feed
Digital inputs	
Number	4
Input Type	Types 1 and 3, IEC 61131-2
Input filter	adjustable, up to 40 ms
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor supply	yes
Sensor connection	2-wire, 3-wire, 3-wire+FE
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
General data	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

Ordering data

Module variants	Type	Qty.	Order No.
Digital input module, 4 channels	UR20-4DI-P	1	1315170000

Accessories

	Type	Qty.	Order No.
Coding elements	KOSM BHZ5.00	100	1483050000
Termination kit	UR20-EBK-ACC	5	1346610000
Swivel marker	UR20-SM-ACC	20	1339920000
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR	192	1323700000
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS	960	1323710000
Module marker for custom printing	DEK 5/8-11.5 MC SDR	100	1341610000
Module marker for neutral	DEK 5/8-11.5 MC NE WS	500	1341630000
Thermotransfer version (Material: Polyester)	THM UR20 GE * <sup>1)</sup>	1	1429910000
Thermotransfer version (Material: Polyester)	THM UR20 WS * <sup>1)</sup>	1	1429420000
Paper version for Laserprinter	ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
Replacement parts			
Electronics module	UR20-EM-1315170000-SP	1	1346640000
Basic module	UR20-BM-SP	5	1350930000
Plug-in connector unit	UR20-PK-1315170000-SP	5	1346440000
<b>Note</b>	* <sup>1)</sup> 1 roll = 1000 label = 1 Qty. * <sup>2)</sup> 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315170000



Let's connect.

4DI-P-3W

- 4 digital inputs for sensors such as transmitters, switches and proximity sensors
- Positive switching
- Reverse polarity protection
- 2-wire and 3-wire connection
- Input filter can be set channel by channel
- Integrated sensor supply
- Types 1 and 3 acc. to IEC 61131-2

UR20-4DI-P-3W



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	< 10 mA + sensor feed
Digital inputs	
Number	4
Input Type	Types 1 and 3, IEC 61131-2
Input filter	adjustable, up to 40 ms
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor supply	yes
Sensor connection	2-wire, 3-wire
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
General data	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Type	Qty.	Order No.
UR20-4DI-P-3W	1	2009360000

Ordering data

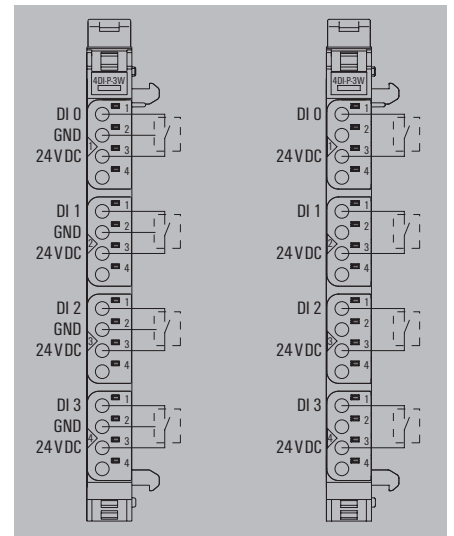
Module variants	
Digital input module, 4 channels, 3-wire	

Accessories

Accessories	
Coding elements	KOSM BHZ5.00 100 1483050000
Termination kit	UR20-EBK-ACC 5 1346610000
Swivel marker	UR20-SM-ACC 20 1339920000
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR 192 1323700000
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS 960 1323710000
Module marker for custom printing	DEK 5/8-11.5 MC SDR 100 1341610000
Module marker for neutral	DEK 5/8-11.5 MC NE WS 500 1341630000
Thermotransfer version (Material: Polyester)	THM UR20 GE * <sup>1)</sup> 1 1429910000
Thermotransfer version (Material: Polyester)	THM UR20 WS * <sup>1)</sup> 1 1429420000
Paper version for Laserprinter	ESO UR20 DIN A4 WS * <sup>2)</sup> 10 1429430000
Replacement parts	
Electronics module	UR20-EM-2009360000-SP 1 2011260000
Basic module	UR20-BM-SP 5 1350930000
Plug-in connector unit	UR20-PK-2009360000-SP 5 2011240000
Note	

Type	Qty.	Order No.
UR20-EM-2009360000-SP	1	2011260000
UR20-BM-SP	5	1350930000
UR20-PK-2009360000-SP	5	2011240000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
 \*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL (in preparation)	UL 61010-2-201
MSIP (in preparation)	MSIP-REM-WMG-2009360000



Let's connect.

### 8DI-P-2W

- 8 digital inputs for sensors such as transmitters, switches and proximity sensors
- Positive switching
- Reverse polarity protection
- 2-wire connection
- Input filter can be set channel by channel
- Types 1 and 3 acc. to IEC 61131-2

### UR20-8DI-P-2W



#### Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	< 22 mA
Digital inputs	
Number	8
Input Type	Types 1 and 3, IEC 61131-2
Input filter	adjustable, up to 40 ms
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor supply	yes
Sensor connection	2-wire
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
General data	
Weight	83 g
Dimensions (H/W/D)	120 mm (with catch lever) 128 mm x 11,5 mm x 76 mm

#### Ordering data

Module variants	
Digital input module, 8 channels, 2-wire	

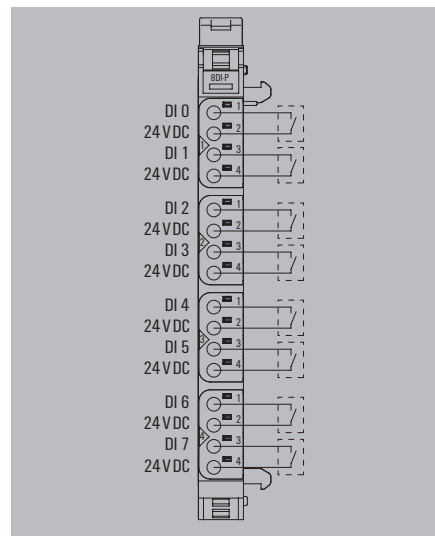
Type	Qty.	Order No.
UR20-8DI-P-2W	1	1315180000

#### Accessories

Accessories	
Coding elements	KOSM BHZ5.00
Termination kit	UR20-EBK-ACC
Swivel marker	UR20-SM-ACC
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS
Module marker for custom printing	DEK 5/8-11.5 MC SDR
Module marker for neutral	DEK 5/8-11.5 MC NE WS
Thermotransfer version (Material: Polyester)	THM UR20 GE * <sup>1)</sup>
Thermotransfer version (Material: Polyester)	THM UR20 WS * <sup>1)</sup>
Paper version for Laserprinter	ESO UR20 DIN A4 WS * <sup>2)</sup>
Replacement parts	
Electronics module	UR20-EM-1315180000-SP
Basic module	UR20-BM-SP
Plug-in connector unit	UR20-PK-1315180000-SP
Note	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1315180000-SP	1	1490220000
UR20-BM-SP	5	1350930000
UR20-PK-1315180000-SP	5	1346430000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508



Let's connect.



8DI-P-3W

- 8 digital inputs for sensors such as transmitters, switches and proximity sensors
- Positive switching
- Reverse polarity protection
- 2-wire and 3-wire connection
- Input filter can be set channel by channel
- Integrated sensor supply
- Types 1 and 3 acc. to IEC 61131-2

UR20-8DI-P-3W



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	< 22 mA + sensor feed
Digital inputs	
Number	8
Input Type	Types 1 and 3, IEC 61131-2
Input filter	adjustable, up to 40 ms
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor supply	yes
Sensor connection	2-wire, 3-wire
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
General data	
Weight	83 g
Dimensions (H/W/D)	120 mm (with catch lever) 128 mm x 11,5 mm x 76 mm

Type	Qty.	Order No.
UR20-8DI-P-3W	1	1394400000

Ordering data

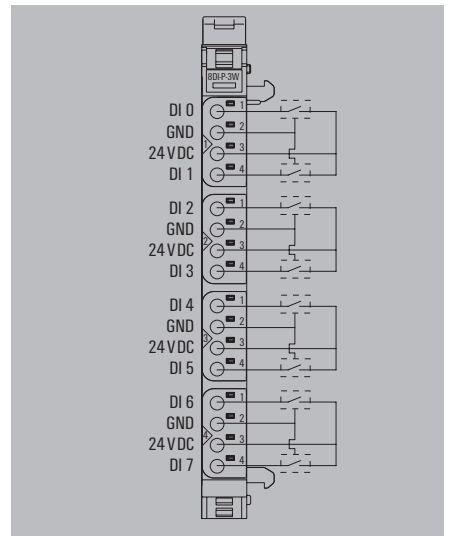
Module variants	
Digital input module, 8 channels, 3-wire	

Accessories

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1394400000-SP	1	1346650000
UR20-BM-SP	5	1350930000
UR20-PK-1394400000-SP	5	1411430000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1394400000



Let's connect.

### 8DI-P-3W-HD

- 8 plugs with 4 connections per module
- 8 digital inputs for sensors such as transmitters, switches and proximity sensors
- Positive switching
- Reverse polarity protection
- 2-wire and 3-wire connection
- Input filter can be set channel by channel
- Integrated sensor supply
- Types 1 and 3 acc. to IEC 61131-2

### Technical data

<b>System data</b>	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
<b>Supply</b>	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	< 30 mA + sensor feed
<b>Digital inputs</b>	
Number	8
Input Type	Types 1 and 3, IEC 61131-2
Input filter	adjustable, up to 40 ms
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor supply	maximum 150 mA per channel
Sensor connection	2-wire, 3-wire
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
<b>General data</b>	
Weight	83 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

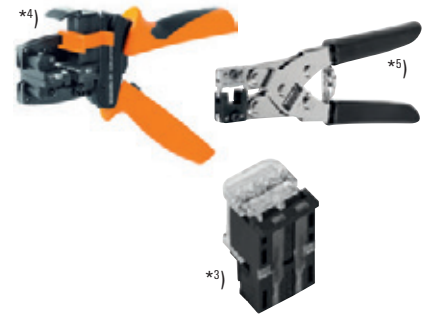
### Ordering data

<b>Module variants</b>	
Digital input module, 8 channels, 3-wire, HD plug	

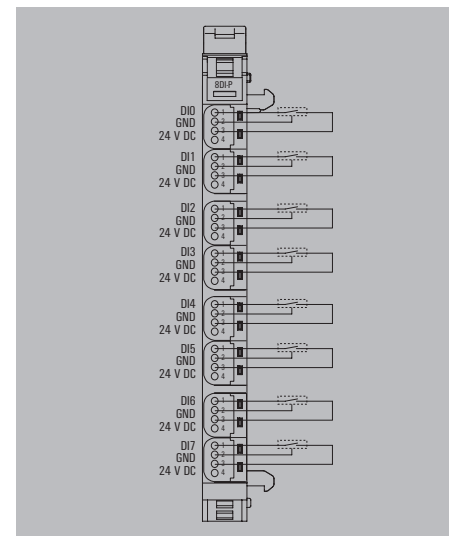
### Accessories

Coding elements	KOSM BHZ5.00	100	1483050000
Termination kit	UR20-EBK-ACC	5	1346610000
Swivel marker	UR20-SM-ACC	20	1339920000
*3) HD-Plug	UR20-PGO.35	8	1469340000
*4) Stripping tool	multi-stripax 6-16	1	9202210000
*5) Pressing tool	PWZ-UR20-HD	1	1525820000
Module marker for custom printing	DEK 5/8-11.5 MC SDR	100	1341610000
Module marker for neutral	DEK 5/8-11.5 MC NE WS	500	1341630000
Thermotransfer version (Material: Polyester)	THM UR20 GE *1)	1	1429910000
Thermotransfer version (Material: Polyester)	THM UR20 WS *1)	1	1429420000
Paper version for Laserprinter	ESD UR20 DIN A4 WS *2)	10	1429430000
<b>Replacement parts</b>			
Electronics module	UR20-EM-1315190000-SP	1	1346670000
Basic module	UR20-BM-SP	5	1350930000
Plug-in connector unit	UR20-PK-1315190000-SP	5	1518800000
<b>Note</b>			

### UR20-8DI-P-3W-HD



Note: Please order connector separately



Type	Qty.	Order No.
UR20-8DI-P-3W-HD	1	1315190000

Type	Qty.	Order No.
UR20-EM-1315190000-SP	1	1346670000
UR20-BM-SP	5	1350930000
UR20-PK-1315190000-SP	5	1518800000

\*1) 1 roll = 1000 label = 1 Qty.  
\*2) 1 sheet = 60 label = 1 Qty.

Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508



Let's connect.

16DI-P

- 16 digital inputs
- Positive switching
- Reverse polarity protection
- 1-wire connection
- Permanently set input filter, 3 ms
- Types 1 and 3 acc. to IEC 61131-2

UR20-16DI-P



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	< 42 mA
Digital inputs	
Number	16
Input Type	Types 1 and 3, IEC 61131-2
Input filter	3 ms
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor supply	no
Sensor connection	1-wire
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
General data	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever) 128 mm x 11,5 mm x 76 mm

Ordering data

Module variants	
Digital input module, 16 channels	

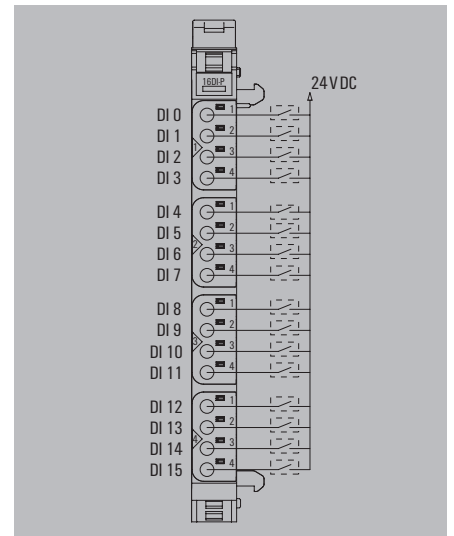
Type	Qty.	Order No.
UR20-16DI-P	1	1315200000

Accessories

Replacement parts	
Electronics module	UR20-EM-1315200000-SP
Basic module	UR20-BM-SP
Plug-in connector unit	UR20-PK-1315200000-SP
Note	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315200000



Let's connect.

**16DI-P-PLC-INT**

- 16 digital inputs
- Positive switching
- Reverse polarity protection
- For connecting a PLC interface element
- Permanently set input filter, 3 ms
- Types 1 and 3 acc. to IEC 61131-2

**UR20-16DI-P-PLC-INT****Technical data****System data**

Interface  
Transmission rate of system bus  
Galvanic isolation

**Supply**

Voltage supply  
Current consumption ( $I_N$  in power segment of field bus coupler), typ.  
Current consumption ( $I_N$  external)

**Digital inputs**

Number  
Input Type  
Input filter  
Input voltage, low  
Input voltage, high  
Sensor supply  
Sensor connection  
Reverse polarity protection  
Module diagnosis  
Individual channel diagnosis

**General data**

Weight  
Dimensions (H/W/D)

u-remote system bus

48 Mbps

DC 500 V between current paths

24 V DC +20 % / - 15 % via the system bus

8 mA

&lt; 42 mA

16

Types 1 and 3, IEC 61131-2

3 ms

&lt; 5 V

&gt; 11 V

external

PLC interface

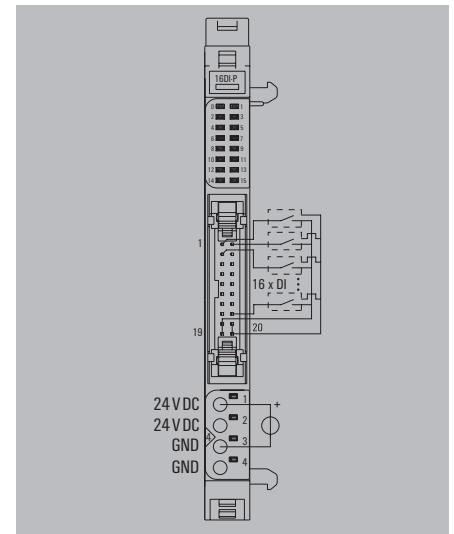
yes

yes

no

73 g

120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

**Ordering data****Module variants**

Digital input module, 16 channels, PLC interface

Type	Qty.	Order No.
UR20-16DI-P-PLC-INT	1	1315210000

**Accessories**

Coding elements  
Termination kit  
Swivel marker  
Connection marker for pusher custom printing  
Connection marker for pusher neutral  
Module marker for custom printing  
Module marker for neutral  
Thermotransfer version (Material: Polyester)  
Thermotransfer version (Material: Polyester)  
Paper version for Laserprinter  
PLC interface element  
Pre-assembled cable, 1m

**Replacement parts**

Electronics module  
Basic module  
Plug-in connector unit

**Note**

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
RS 16IO 1W H S	1	9445700000
PAC-UNIV-HE20-LCH-1M	1	7789306010

UR20-EM-1315210000-SP	1	1346690000
UR20-BM-SP	5	1350930000
UR20-PK-1315210000-SP	5	1346590000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.

Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508



Let's connect.

2DI-P-TS

- 2 digital inputs for sensors such as transmitters, switches and proximity sensors
- Positive switching
- 2-wire, 3-wire, 3-wire+FE connection
- Input filter can be set channel by channel
- Types 1 and 3 acc. to IEC 61131-2
- 1 µs Timestamp resolution

UR20-2DI-P-TS



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	< 10 mA + sensor feed
Digital Inputs	
Number	2
Input Type	Type 1 und 3, IEC 61131-2
Input filter	adjustable, up to 40 ms
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor supply	yes
Sensor connection	2-wire, 3-wire, 3-wire+FE
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
Data width Timestamp	16 Bit
Resolution Timestamp	1 µs
General data	
Weight	83 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

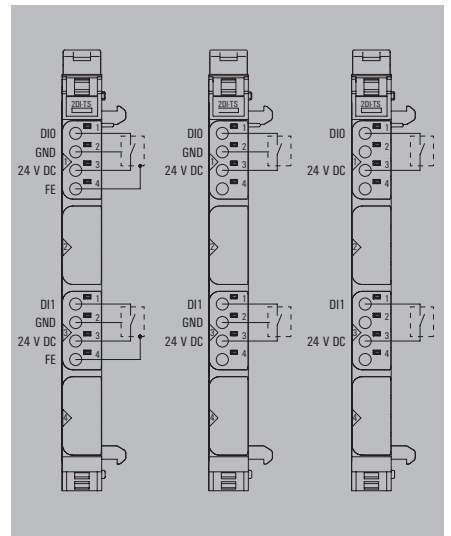
Type	Qty.	Order No.
UR20-2DI-P-TS	1	1460140000

Ordering data

Module variants	
Digital input module, 2 channels, Timestamp	

Accessories

Accessories			
Coding elements	KOSM BHZ5.00	100	1483050000
Termination kit	UR20-EBK-ACC	5	1346610000
Swivel marker	UR20-SM-ACC	20	1339920000
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR	192	1323700000
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS	960	1323710000
Module marker for custom printing	DEK 5/8-11.5 MC SDR	100	1341610000
Module marker for neutral	DEK 5/8-11.5 MC NE WS	500	1341630000
Thermotransfer version (Material: Polyester)	THM UR20 GE * <sup>1)</sup>	1	1429910000
Thermotransfer version (Material: Polyester)	THM UR20 WS * <sup>1)</sup>	1	1429420000
Paper version for Laserprinter	ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
Replacement parts			
Electronics module	UR20-EM-1460140000-SP	1	1463690000
Basic module	UR20-BM-SP	5	1350930000
Plug-in connector unit	UR20-PK-1460140000-SP	5	1484110000
Note			
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty.			
* <sup>2)</sup> 1 sheet = 60 label = 1 Qty.			



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1460140000



Let's connect.

4DI-P-TS

- 4 digital inputs for sensors such as transmitters, switches and proximity sensors
- Positive switching
- 2-wire, 3-wire, 3-wire+FE connection
- Input filter can be set channel by channel
- Types 1 and 3 acc. to IEC 61131-2
- 1 µs Timestamp resolution

UR20-4DI-P-TS



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	< 10 mA + sensor feed
Digital Inputs	
Number	4
Input Type	Types 1 and 3, IEC 61131-2
Input filter	adjustable, up to 40 ms
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor supply	yes
Sensor connection	2-wire, 3-wire, 3-wire+FE
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
Data width Timestamp	16 Bit
Resolution Timestamp	1 µs
General data	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Type	Qty.	Order No.
UR20-4DI-P-TS	1	1460150000

Ordering data

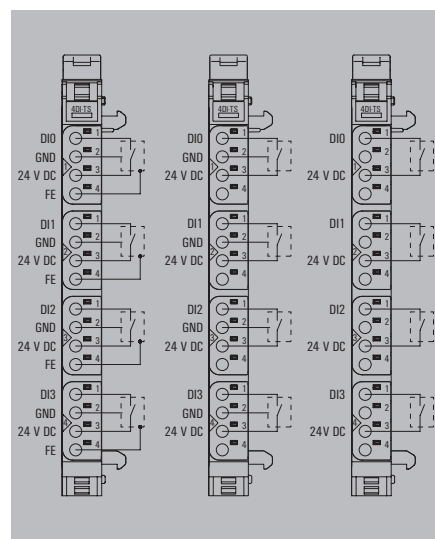
Module variants	
Digital input module, 4 channels, Timestamp	

Accessories

Accessories	
Coding elements	KDSM BHZ5.00
Termination kit	UR20-EBK-ACC
Swivel marker	UR20-SM-ACC
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS
Module marker for custom printing	DEK 5/8-11.5 MC SDR
Module marker for neutral	DEK 5/8-11.5 MC NE WS
Thermotransfer version (Material: Polyester)	THM UR20 GE * <sup>1)</sup>
Thermotransfer version (Material: Polyester)	THM UR20 WS * <sup>1)</sup>
Paper version for Laserprinter	ESO UR20 DIN A4 WS * <sup>2)</sup>
Replacement parts	
Electronics module	UR20-EM-1460150000-SP
Basic module	UR20-BM-SP
Plug-in connector unit	UR20-PK-1460150000-SP
Note	

Type	Qty.	Order No.
KDSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1460150000-SP	1	1463680000
UR20-BM-SP	5	1350930000
UR20-PK-1460150000-SP	5	1484430000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1460150000



Let's connect.



4DI-N

- 4 digital inputs for sensors such as transmitters, switches and proximity sensors
- Negative switching
- Reverse polarity protection
- 2-wire, 3-wire, 3-wire+FE connection
- Input filter can be set channel by channel
- Integrated sensor supply
- Types 1 and 3 acc. to IEC 61131-2

UR20-4DI-N



Technical data

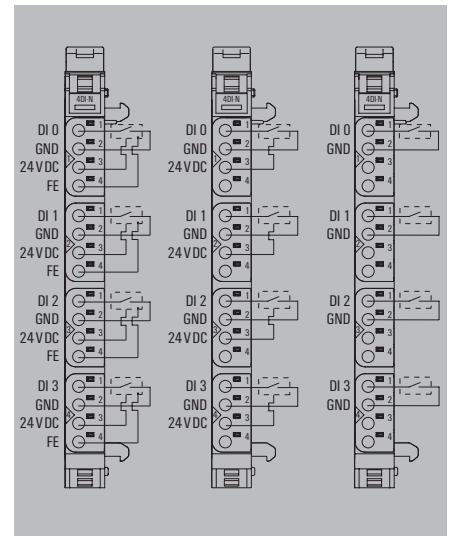
System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption from system current path I <sub>sys</sub>	8 mA
Current consumption from input current path I <sub>IN</sub>	< 12 mA + sensor feed
Inputs	
Number	4
Input Type	N-switching, comparable to Type 1 and Type 3 (IEC 61131-2)
Input filter	adjustable, up to 40 ms
Input voltage, low	-5 V referred to system power supply U <sub>sys</sub>
Input voltage, high	-11 V referred to system power supply U <sub>sys</sub>
Sensor supply	max. 2 A per plug, total max. 8 A
Sensor connection	2-wire, 3-wire, 3-wire + FE
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
General Data	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Ordering data

Module variants	Type	Qty.	Order No.
Digital input module, 4 channels	UR20-4DI-N	1	1315350000

Accessories

	Type	Qty.	Order No.
Coding elements	KOSM BHZ5.00	100	1483050000
Termination kit	UR20-EBK-ACC	5	1346610000
Swivel marker	UR20-SM-ACC	20	1339920000
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR	192	1323700000
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS	960	1323710000
Module marker for custom printing	DEK 5/8-11.5 MC SDR	100	1341610000
Module marker for neutral	DEK 5/8-11.5 MC NE WS	500	1341630000
Thermotransfer version (Material: Polyester)	THM UR20 GE * <sup>1)</sup>	1	1429910000
Thermotransfer version (Material: Polyester)	THM UR20 WS * <sup>1)</sup>	1	1429420000
Paper version for Laserprinter	ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
Replacement parts			
Electronics module	UR20-EM-1315350000-SP	1	1346870000
Basic module	UR20-BM-SP	5	1350930000
Plug-in connector unit	UR20-PK-1315350000-SP	5	1559770000
<b>Note</b>			
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty.			
* <sup>2)</sup> 1 sheet = 60 label = 1 Qty.			



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315350000



Let's connect.

### 8DI-N-3W

- 8 digital inputs for sensors such as transmitters, switches and proximity sensors
- Negative switching
- Reverse polarity protection
- 2-wire and 3-wire connection
- Input filter can be set channel by channel
- Integrated sensor supply
- Types 1 and 3 acc. to IEC 61131-2

### UR20-8DI-N-3W



#### Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption from system current path I <sub>sys</sub>	8 mA
Current consumption from input current path I <sub>IN</sub>	< 12 mA + sensor feed
Inputs	
Number	8
Input Type	N-switching, comparable to Type 1 and Type 3 (IEC 61131-2)
Input filter	adjustable, up to 40 ms
Input voltage, low	-5 V referred to system power supply U <sub>sys</sub>
Input voltage, high	-11 V referred to system power supply U <sub>sys</sub>
Sensor supply	max. 2 A per plug, total max. 8 A
Sensor connection	2-wire, 3-wire
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
General Data	
Weight	83 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

#### Ordering data

Module variants	
Digital input module, 8 channels, 3-wire	

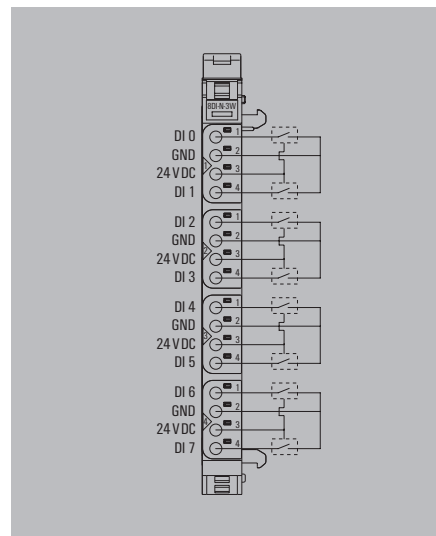
Type	Qty.	Order No.
UR20-8DI-N-3W	1	1315370000

#### Accessories

Accessories	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1315370000-SP	1	1346880000
UR20-BM-SP	5	1350930000
UR20-PK-1315370000-SP	5	1559780000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315390000



Let's connect.

16DI-N

- 16 digital inputs
- Negative switching
- Reverse polarity protection
- 1-wire connection
- Permanently set input filter, 3 ms
- Types 1 and 3 acc. to IEC 61131-2

UR20-16DI-N



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption from system current path I <sub>sys</sub>	8 mA
Current consumption from input current path I <sub>IN</sub>	< 15 mA
Inputs	
Number	16
Input Type	N-switching, comparable to Type 1 and Type 3 (IEC 61131-2)
Input filter	3 ms
Input voltage, low	-5 V referred to system power supply U <sub>sys</sub>
Input voltage, high	-11 V referred to system power supply U <sub>sys</sub>
Sensor supply	no
Sensor connection	1-wire
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
General Data	
Weight	88 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Type	Qty.	Order No.
UR20-16DI-N	1	1315390000

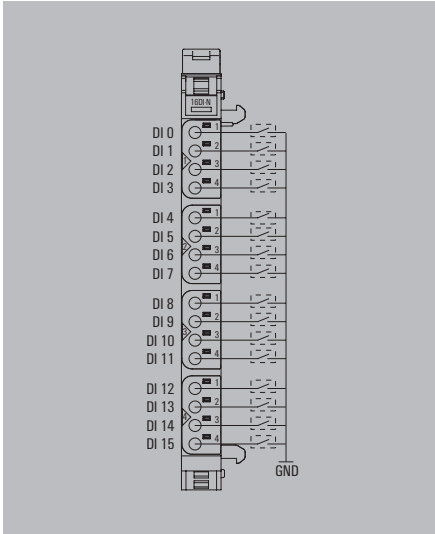
Ordering data

Module variants	
Digital input module, 16 channels	

Accessories

Replacement parts			
Electronics module	UR20-EM-1315390000-SP	1	1346920000
Basic module	UR20-BM-SP	5	1350930000
Plug-in connector unit	UR20-PK-1315390000-SP	5	1559790000
Note			

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty.		
* <sup>2)</sup> 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508



Let's connect.

### 16DI-N-PLC-INT

- 16 digital inputs
- Negative switching
- Reverse polarity protection
- For connecting a PLC interface element
- Permanently set input filter, 3 ms
- Types 1 and 3 acc. to IEC 61131-2

### UR20-16DI-N-PLC-INT



#### Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption from system current path I <sub>sys</sub>	8 mA
Current consumption from input current path I <sub>IN</sub>	< 15 mA
Inputs	
Number	16
Input Type	N-switching, comparable to Type 1 and Type 3 (IEC 61131-2)
Input filter	3 ms
Input voltage, low	-5 V referred to system power supply U <sub>sys</sub>
Input voltage, high	-11 V referred to system power supply U <sub>sys</sub>
Sensor supply	external
Sensor connection	PLC interface
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
General Data	
Weight	73 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Type	Qty.	Order No.
UR20-16DI-N-PLC-INT	1	1315400000

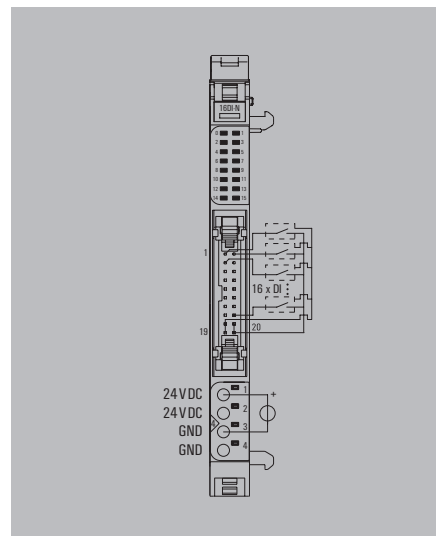
#### Ordering data

Module variants	
Digital input module, 16 channels, PLC interface	

#### Accessories

Accessories	
Coding elements	KOSM BHZ5.00
Termination kit	UR20-EBK-ACC
Swivel marker	UR20-SM-ACC
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS
Module marker for custom printing	DEK 5/8-11.5 MC SDR
Module marker for neutral	DEK 5/8-11.5 MC NE WS
Thermotransfer version (Material: Polyester)	THM UR20 GE * <sup>1)</sup>
Thermotransfer version (Material: Polyester)	THM UR20 WS * <sup>1)</sup>
Paper version for Laserprinter	ESO UR20 DIN A4 WS * <sup>2)</sup>
PLC interface element	RS 16IO 1W H S
Pre-assembled cable, 1m	PAC-UNIV-HE20-LCH-1M
Replacement parts	
Electronics module	UR20-EM-1315400000-SP
Basic module	UR20-BM-SP
Plug-in connector unit	UR20-PK-1315400000-SP
Note	
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty.	
* <sup>2)</sup> 1 sheet = 60 label = 1 Qty.	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
RS 16IO 1W H S	1	9445700000
PAC-UNIV-HE20-LCH-1M	1	7789306010
UR20-EM-1315400000-SP	1	1346930000
UR20-BM-SP	5	1350930000
UR20-PK-1315400000-SP	5	1559800000



Product standard	
Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL (in preparation)	UL 508



Let's connect.

4DI-2W-230V-AC

- 4 digital inputs for sensors such as transmitters, switches and proximity sensors
- Input filter can be set channel by channel
- Galvanic isolation by 4 kV
- Positive switching
- 2-wire connection
- Types 3 acc. to IEC 61131-2

UR20-4DI-2W-230V-AC



Technical data

System data

Interface  
Transmission rate of system bus  
Galvanic isolation

Line-to-line voltage

Supply

Voltage supply  
Current consumption from system current path  $I_{SYS}$   
Current consumption from input current path  $I_{IN}$

Inputs

Number  
Input Type  
Input filter  
Input voltage, low  
Input voltage, high  
Input voltage max.  
Input frequency  
Sensor supply  
Sensor connection  
Module diagnosis  
Individual channel diagnosis

General Data

Weight  
Dimensions (H/W/D)

u-remote system bus	48 Mbps
4 kV between channels and between channels and powersupply	400 V between channels
24 V DC +20 % / - 15 % via the system bus	8 mA
no	no
4	Type 3, IEC 61131-2, P-switching
adjustable, up to 10 ms	< 65 V
≥ 80 V	277 V (UL); 264,5 V (VDE)
50 Hz, 60 Hz	no
no	2-wire
yes	yes
no	87 g
	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Ordering data

Module variants

Digital input module, 4 channels, 230V AC

Type	Qty.	Order No.
UR20-4DI-2W-230V-AC	1	1550070000

Accessories

Coding elements  
Termination kit  
Swivel marker  
Connection marker for pusher custom printing  
Connection marker for pusher neutral  
Module marker for custom printing  
Module marker for neutral  
Thermotransfer version (Material: Polyester)  
Thermotransfer version (Material: Polyester)  
Paper version for Laserprinter

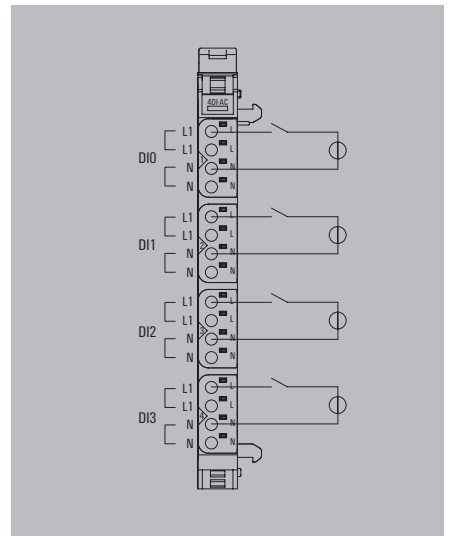
Replacement parts

Electronics module  
Basic module  
Plug-in connector unit

Note

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1550070000-SP	1	1558880000
UR20-BM-SP	5	1350930000
UR20-PK-1550070000-SP	5	1559820000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL (in preparation)	UL 508
MSIP	MSIP-REM-WMG-1550070000



Let's connect.





# Digital output modules

P- or N-switching; short-circuit-proof; up to 3-wire+FE

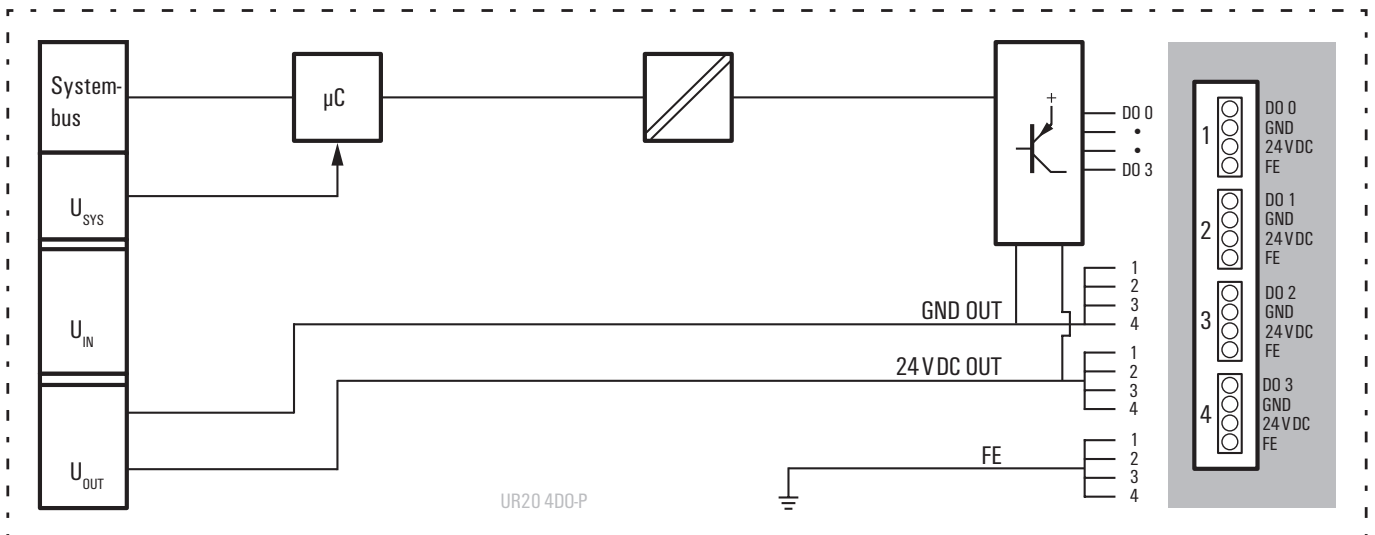
IP20  
A

Digital output modules are available in the following variants: 4DO, 8DO with 2-wire technology, 16DO with or without PLC interface connection. They are used primarily for incorporating decentralised actuators. The digital output modules are available as P- or N-switching variant. All outputs are designed for DC-13 actuators acc. to DIN EN 60947-5-1 and IEC 61131-2 specifications. Just like the digital input modules, frequencies of up to 1 kHz are possible. Maximum system safety is ensured by protecting the outputs. This consists of an automatic restart following a short-circuit. Clearly recognisable LEDs also signal the status of the entire module as well as individual channels.

In addition to the standard applications of the digital output modules, the portfolio also includes special variants, such as the 4RO-SSR module for rapidly switching applications. Fitted with solid state technology, 0.5 A is available for each output. Furthermore, there is also the 4RO-CO relay module for power-intensive applications. This is equipped with four change-over contacts, optimised for a switching voltage of 277 V AC and designed for a switching current of 6 A. To serve negative switching requirements there is a parameterisable version of the 4-DO Module.

The module electronics supply the connected actuators from the output current path ( $U_{OUT}$ ).

## UR20-4DO-P block diagram example



4DO-P

- 4 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- 2-wire, 3-wire, 3-wire+FE connection
- Positive switching
- DC-13 load
- IEC 61131-2 compliant

UR20-4DO-P



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>IN</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>OUT</sub> in the respective power segment)	10 mA + load
Digital outputs	
Number	4
Type of load	ohmic, inductive, lamp load
Response time, high	100 µs
Response time, low	250 µs
Output current per channel, max.	0.5 A
Output current per module, max.	2 A
Switching frequency max.	
	Resistive load (min. 47 Ω)
	Inductive load (DC 13)
	Lamp load (12 W)
Actuator connection	2-wire, 3-wire, 3-wire+FE
Short-circuit-proof	thermal
Non reactive	yes
Module diagnosis	yes
Individual channel diagnosis	no
Shut-down energy (inductive)	150 mJ / channel
Response time of protective circuit (current limitation)	< 100 µs (ambient temperature dependent)
General data	
Weight	86 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

Ordering data

Module variants	
Digital output module, 4 channels	

Type	Qty.	Order No.
UR20-4DO-P	1	1315220000

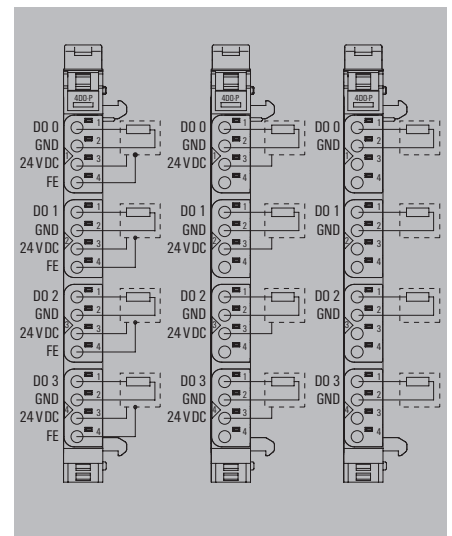
Accessories

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

Replacement parts			
Electronics module	UR20-EM-1315220000-SP	1	1346700000
Basic module	UR20-BM-SP	5	1350930000
Plug-in connector unit	UR20-PK-1315220000-SP	5	1483960000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315220000



Let's connect.

4D0-P-2A

- 4 digital outputs
- Module can be loaded up to 8 A
- Can be loaded up to 2 A per channel
- Short-circuit-proof
- 2-wire, 3-wire, 3-wire+FE connection
- Positive switching
- DC-13 load
- IEC 61131-2 compliant

UR20-4D0-P-2A



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>IN</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>OUT</sub> in the respective power segment)	10 mA + load
Digital outputs	
Number	4
Type of load	ohmic, inductive, lamp load
Response time, high	100 µs
Response time, low	250 µs
Output current per channel, max.	2 A
Output current per module, max.	8 A
Switching frequency max.	
	1 kHz
	Resistive load (min. 47 Ω)
	Inductive load (DC 13)
	Lamp load (48 W)
Actuator connection	2-wire, 3-wire, 3-wire+FE
Short-circuit-proof	thermal
Non reactive	yes
Module diagnosis	yes
Individual channel diagnosis	no
Shut-down energy (inductive)	150 mJ / channel
Response time of protective circuit (current limitation)	< 100 µs (ambient temperature dependent)
General data	
Weight	86 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

Ordering data

Module variants	
Digital output module, 4 channels, 2 A	

Type	Qty.	Order No.
UR20-4D0-P-2A	1	1315230000

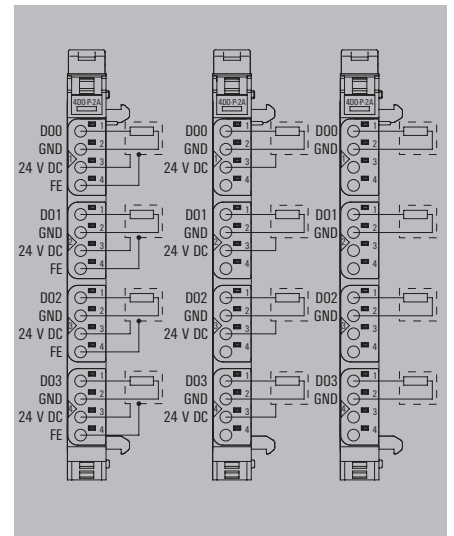
Accessories

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

Note

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
 \*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315230000



Let's connect.

**4D0-PN-2A**

- 4 digital outputs
- Module can be loaded up to 8 A
- Can be loaded up to 2 A per channel
- Short-circuit-proof
- Positive or negative switching
- 2-wire, 3-wire, 3-wire+FE connection
- IEC 61131-2 compliant

**UR20-4D0-PN-2A**



**Technical data**

<b>System data</b>	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
<b>Supply</b>	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>IN</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>OUT</sub> in the respective power segment)	10 mA + load
<b>Digital outputs</b>	
Number	4
Positive or negative switching	parameterise
Type of load	ohmic, inductive, lamp load
Response time, high	100 µs
Response time, low	250 µs
Output current per channel, max.	2 A
Output current per module, max.	8 A
Switching frequency max.	
	Resistive load (min. 47 Ohm)
	Inductive load (DC 13)
	Lamp load (48 W)
Actuator connection	2-wire, 3-wire, 3-wire+FE
Short-circuit-proof	thermal
Non reactive	yes
Module diagnosis	yes
Individual channel diagnosis	no
Shut-down energy (inductive)	150 mJ / channel
Response time of protective circuit (current limitation)	< 100 µs (ambient temperature dependent)
<b>General data</b>	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

**Ordering data**

<b>Module variants</b>	
Digital output module, 4 channels, positively or negatively switching	

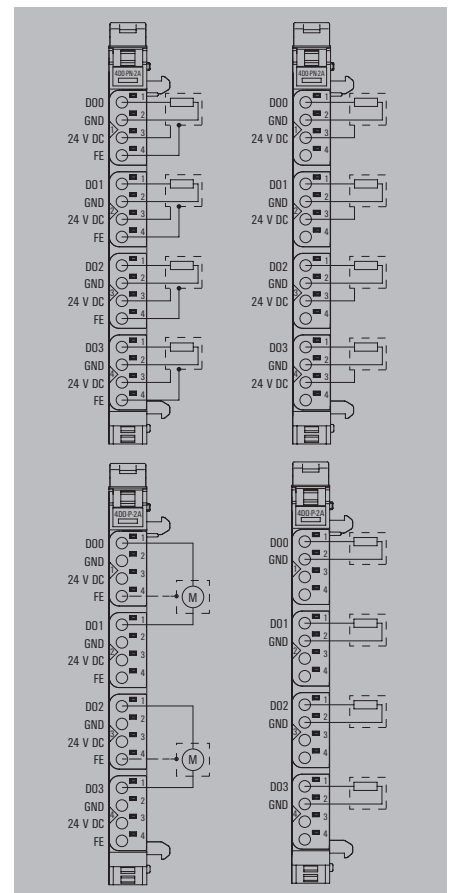
**Accessories**

Coding elements	KDSM BHZ5.00	100	1483050000
Termination kit	UR20-EBK-ACC	5	1346610000
Swivel marker	UR20-SM-ACC	20	1339920000
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR	192	1323700000
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS	960	1323710000
Module marker for custom printing	DEK 5/8-11.5 MC SDR	100	1341610000
Module marker for neutral	DEK 5/8-11.5 MC NE WS	500	1341630000
Thermotransfer version (Material: Polyester)	THM UR20 GE * <sup>1)</sup>	1	1429910000
Thermotransfer version (Material: Polyester)	THM UR20 WS * <sup>1)</sup>	1	1429420000
Paper version for Laserprinter	ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
<b>Replacement parts</b>			
Electronics module	UR20-EM-1394420000-SP	1	1480950000
Basic module	UR20-BM-SP	5	1350930000
Plug-in connector unit	UR20-PK-1394420000-SP	5	1483980000
<b>Note</b>			

Type	Qty.	Order No.
UR20-4D0-PN-2A	1	1394420000

Type	Qty.	Order No.
KDSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1394420000-SP	1	1480950000
UR20-BM-SP	5	1350930000
UR20-PK-1394420000-SP	5	1483980000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
 \*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1394420000



Let's connect.

8DO-P

- 8 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- 2-wire connection
- Positive switching
- DC-13 load
- IEC 61131-2 compliant

UR20-8DO-P



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>IN</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>OUT</sub> in the respective power segment)	15 mA + load
Digital outputs	
Number	8
Type of load	ohmic, inductive, lamp load
Response time, high	100 µs
Response time, low	250 µs
Output current per channel, max.	0.5 A
Output current per module, max.	4 A
Switching frequency max.	
	1 kHz
	0.2 Hz without snubber diode / 1 kHz with suitable snubber diode
	1 kHz
Actuator connection	2-wire
Short-circuit-proof	thermal
Non reactive	yes
Module diagnosis	yes
Individual channel diagnosis	no
Shut-down energy (inductive)	150 mJ / channel
Response time of protective circuit (current limitation)	< 100 µs (ambient temperature dependent)
General data	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

Type	Qty.	Order No.
UR20-8DO-P	1	1315240000

\*) For this and additional technical data, please refer to the manual available at [www.weidmueller.de](http://www.weidmueller.de) or scan the QR code below.

Ordering data

Module variants	
Digital output module, 8 channels	

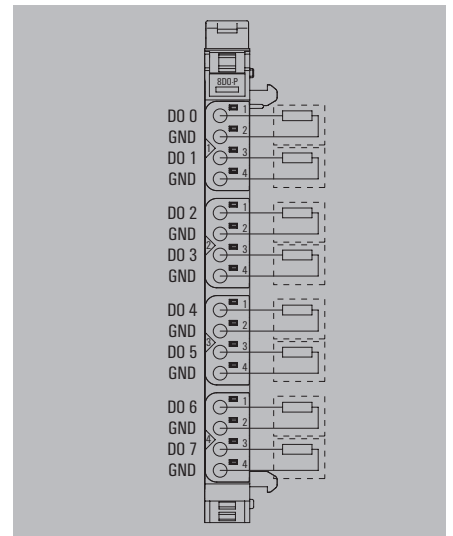
Accessories

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	

Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE *1)	1	1429910000
THM UR20 WS *1)	1	1429420000
ESD UR20 DIN A4 WS *2)	10	1429430000
UR20-EM-1315240000-SP	1	1346720000
UR20-BM-SP	5	1350930000
UR20-PK-1315240000-SP	5	1346410000

\*1) 1 roll = 1000 label = 1 Qty.  
\*2) 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315240000



Let's connect.

### 8DO-P-2W-HD

- 8 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- 2-wire connection
- Positive switching
- DC-13 load
- IEC 61131-2 compliant

### Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	500 V DC between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>IN</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>OUT</sub> in the respective power segment)	40 mA + load
Digital outputs	
Number	8
Type of load	ohmic, inductive, lamp load
Response time, high	max. 50 µs
Response time, low	max. 100 µs
Output current per channel, max.	0.5 A
Output current per module, max.	4
Switching frequency max.	
	1 kHz
	0.2 Hz
	1 kHz
Actuator connection	2-wire
Short-circuit-proof	thermal
Non reactive	yes
Module diagnosis	yes
Individual channel diagnosis	no
Shut-down energy (inductive)	150 mJ / channel
Response time of protective circuit (current limitation)	< 100 µs (ambient temperature dependent)
General data	
Weight	88 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

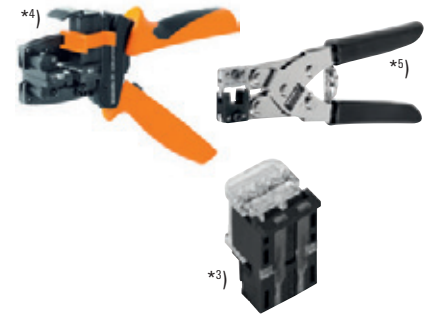
### Ordering data

Module variants	
Digital output module, 8 channels, HD-plug	
Note	

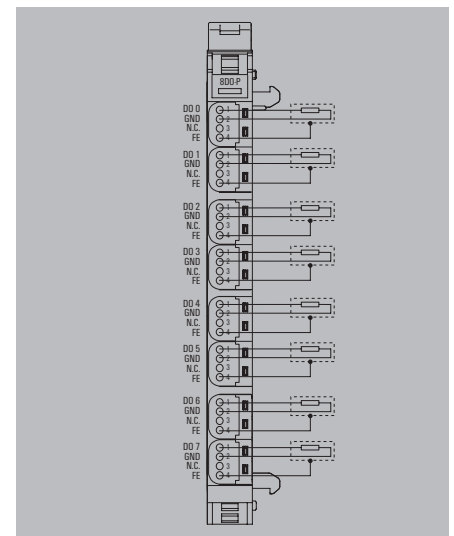
### Accessories

Coding elements	
Termination kit	
Swivel marker	
<sup>*3)</sup> HD-Plug	
<sup>*4)</sup> Stripping tool	
<sup>*5)</sup> Pressing tool	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

### UR20-8DO-P-2W-HD



Note: Please order connector separately



Type	Qty.	Order No.
UR20-8DO-P-2W-HD	1	1509830000

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
UR20-PGO.35	8	1469340000
multi-stripax 6-16	1	9202210000
PWZ-UR20-HD	1	1525820000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE <sup>*1)</sup>	1	1429910000
THM UR20 WS <sup>*1)</sup>	1	1429420000
ESO UR20 DIN A4 WS <sup>*2)</sup>	10	1429430000
UR20-EM-1509830000-SP	1	1515450000
UR20-BM-SP	5	1350930000
UR20-PK-1509830000-SP	5	1559720000

<sup>\*1)</sup> 1 roll = 1000 label = 1 Qty.  
<sup>\*2)</sup> 1 sheet = 60 label = 1 Qty.

Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1509830000



Let's connect.



16DO-P

- 16 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- 1-wire connection
- Positive switching
- DC-13 load
- IEC 61131-2 compliant

UR20-16DO-P



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>IN</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>OUT</sub> in the respective power segment)	20 mA + load
Digital outputs	
Number	16
Type of load	ohmic, inductive, lamp load
Response time, high	100 µs
Response time, low	250 µs
Output current per channel, max.	0.5 A
Output current per module, max.	8 A
Switching frequency max.	
	Resistive load (min. 47 Ω)
	Inductive load (DC 13)
	Lamp load (12 W)
Actuator connection	1-wire
Short-circuit-proof	thermal
Non reactive	yes
Module diagnosis	yes
Individual channel diagnosis	no
Shut-down energy (inductive)	150 mJ / channel
Response time of protective circuit (current limitation)	< 100 µs (ambient temperature dependent)
General data	
Weight	83 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

Type	Qty.	Order No.
UR20-16DO-P	1	1315250000

\*) For this and additional technical data, please refer to the manual available at [www.weidmueller.de](http://www.weidmueller.de) or scan the QR code below.

Ordering data

Module variants	
Digital output module, 16 channels	

Accessories

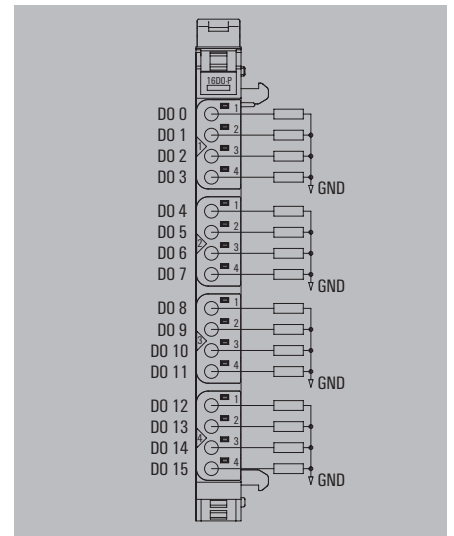
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	

Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

Type	Qty.	Order No.
UR20-EM-1315250000-SP	1	1346730000
UR20-BM-SP	5	1350930000
UR20-PK-1315250000-SP	5	1483990000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315250000



Let's connect.

### 16DO-P-PLC-INT

- 16 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- For connecting a PLC interface element
- Positive switching
- DC-13 load
- IEC 61131-2 compliant

### UR20-16DO-P-PLC-INT



#### Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>IN</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>OUT</sub> external)	20 mA + load
Digital outputs	
Number	16
Type of load	ohmic, inductive, lamp load
Response time, high	100 µs
Response time, low	250 µs
Output current per channel, max.	0.5 A
Output current per module, max.	8 A (2 A with supply via a flat ribbon cable)
Switching frequency max.	
	1 kHz
	0.2 kHz
	1 kHz
Actuator connection	PLC interface
Short-circuit-proof	thermal
Non reactive	yes
Module diagnosis	yes
Individual channel diagnosis	no
Shut-down energy (inductive)	150 mJ / channel
Response time of protective circuit (current limitation)	< 100 µs (ambient temperature dependent)
General data	
Weight	82 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

#### Ordering data

Module variants	
Digital output module, 16 channels, PLC interface	

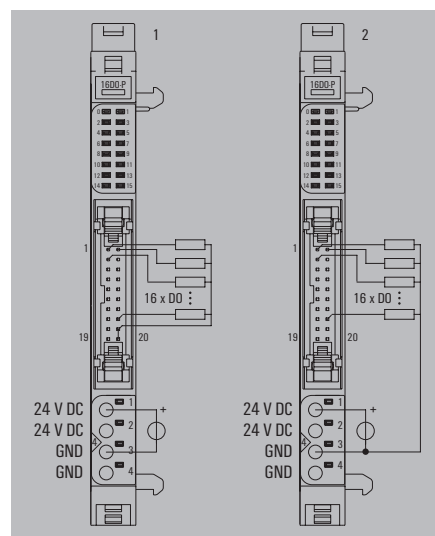
Type	Qty.	Order No.
UR20-16DO-P-PLC-INT	1	1315270000

#### Accessories

Accessories	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
PLC interface element	
Pre-assembled cable, 1m	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
RS 16IO 1W H S	1	9445700000
PAC-UNIV-HE20-LCH-1M	1	7789306010
UR20-EM-1315270000-SP	1	1346740000
UR20-BM-SP	5	1350930000
UR20-PK-1315270000-SP	5	1483940000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315270000



Let's connect.

4DO-N

- 4 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- 2-wire, 3-wire, 3-wire+FE connection
- Negative switching
- DC-13 load
- IEC 61131-2 compliant

UR20-4DO-N



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption from system current path I <sub>sys</sub>	8 mA
Current consumption from output current path I <sub>out</sub>	10 mA + load
Outputs	
Number, Type	4, N-switching
Type of load	ohmic, inductive, lamp load
Response time, high	100 µs
Response time, low	250 µs
Output current per channel, max.	0.5 A
Output current per module, max.	2 A
Switching frequency max.	1 kHz
	2 Hz without free-wheeling diode; 1 kHz with suitable free wheeling diode
	10 Hz
Actuator connection	2-wire, 3-wire, 3-wire + FE
Short-circuit-proof	yes
Non reactive	yes
Module diagnosis	yes
Individual channel diagnosis	no
Shut-down energy (inductive)	150 mJ / channel
Response time of protective circuit (current limitation)	< 100 Hs (ambient temperature dependent)
General Data	
Weight	86 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Ordering data

Module variants	
Digital output module, 4 channels	

Type	Qty.	Order No.
UR20-4DO-N	1	1315410000

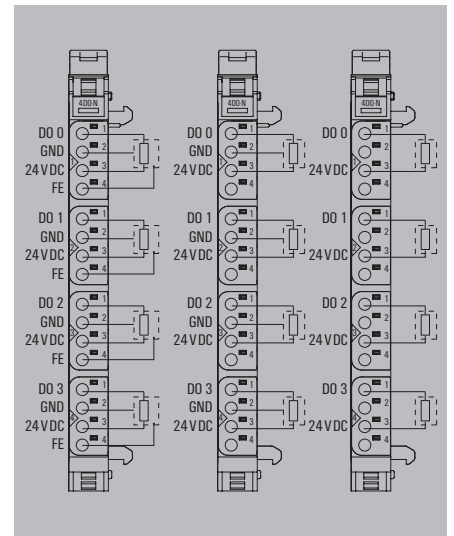
Accessories

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

Replacement parts	
Electronics module	UR20-EM-1315410000-SP 1 1346940000
Basic module	UR20-BM-SP 5 1350930000
Plug-in connector unit	UR20-PK-1315410000-SP 5 1559840000
<b>Note</b>	

* <sup>1)</sup> 1 roll = 1000 label = 1 Qty.
* <sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315410000



Let's connect.

4DO-N-2A

- 4 digital outputs
- Module can be loaded up to 8 A
- Can be loaded up to 2 A per channel
- Short-circuit-proof
- 2-wire, 3-wire, 3-wire+FE connection
- Negative switching
- DC-13 load
- IEC 61131-2 compliant

UR20-4DO-N-2A



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption from system current path I <sub>sys</sub>	8 mA
Current consumption from output current path I <sub>OUT</sub>	10 mA + load
Outputs	
Number, Type	4, N-switching
Type of load	ohmic, inductive, lamp load
Response time, high	100 µs
Response time, low	250 µs
Output current per channel, max.	2 A
Output current per module, max.	8 A
Switching frequency max.	1 kHz
	2 Hz without free-wheeling diode; 1 kHz with suitable free wheeling diode
	10 Hz
Actuator connection	2-wire, 3-wire, 3-wire + FE
Short-circuit-proof	yes
Non reactive	yes
Module diagnosis	yes
Individual channel diagnosis	no
Shut-down energy (inductive)	150 mJ / channel
Response time of protective circuit (current limitation)	< 100 Hs (ambient temperature dependent)
General Data	
Weight	89 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Type	Qty.	Order No.
UR20-4DO-N-2A	1	1315420000

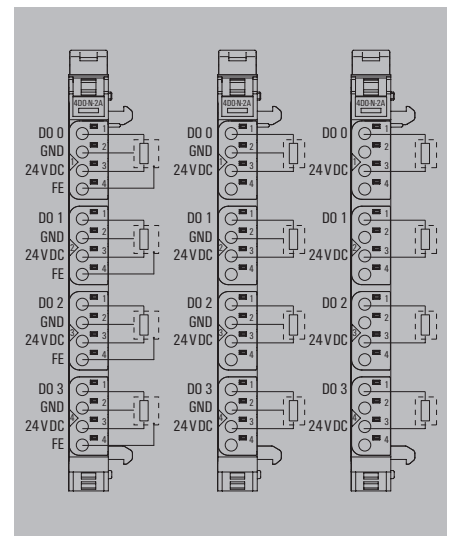
Ordering data

Module variants	
Digital output module, 4 channels, 2 A	

Accessories

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

Replacement parts			
Electronics module	UR20-EM-1315420000-SP	1	1346950000
Basic module	UR20-BM-SP	5	1350930000
Plug-in connector unit	UR20-PK-1315420000-SP	5	1559850000
<b>Note</b>			
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty.			
* <sup>2)</sup> 1 sheet = 60 label = 1 Qty.			



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315420000



Let's connect.

8DO-N

- 8 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- 2-wire connection
- Negative switching
- DC-13 load
- IEC 61131-2 compliant

UR20-8DO-N



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption from system current path I <sub>sys</sub>	8 mA
Current consumption from output current path I <sub>OUT</sub>	10 mA + load
Outputs	
Number, Type	8, N-switching
Type of load	ohmic, inductive, lamp load
Response time, high	100 µs
Response time, low	250 µs
Output current per channel, max.	0.5 A
Output current per module, max.	4 A
Switching frequency max.	1 kHz
	2 Hz without free-wheeling diode; 1 kHz with suitable free wheeling diode
	10 Hz
Actuator connection	2-wire
Short-circuit-proof	yes
Non reactive	yes
Module diagnosis	yes
Individual channel diagnosis	no
Shut-down energy (inductive)	150 mJ / channel
Response time of protective circuit (current limitation)	< 100 µs
General Data	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

Ordering data

Module variants	
Digital output module, 8 channels	

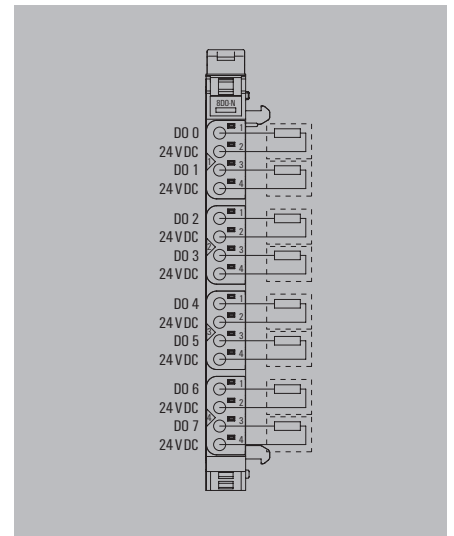
Type	Qty.	Order No.
UR20-8DO-N	1	1315430000

Accessories

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

Replacement parts			
Electronics module	UR20-EM-1315430000-SP	1	1346970000
Basic module	UR20-BM-SP	5	1350930000
Plug-in connector unit	UR20-PK-1315430000-SP	5	1984770000
Note			
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty.			
* <sup>2)</sup> 1 sheet = 60 label = 1 Qty.			



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315430000



Let's connect.

## 16DO-N

- 16 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- 1-wire connection
- Negative switching
- DC-13 load
- IEC 61131-2 compliant

## Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / -15 % via the system bus
Current consumption ( $I_{IN}$ in power segment of field bus coupler), typ.	8 mA
Current consumption ( $I_{OUT}$ in the respective power segment)	15 mA + load
Digital outputs	
Number, Type	16, N-switching
Type of load	ohmic, inductive, lamp load
Response time, high	100 $\mu$ s
Response time, low	250 $\mu$ s
Output current per channel, max.	0.5 A
Output current per module, max.	8 A
Switching frequency max.	1 kHz
	2 Hz
	10 Hz
Actuator connection	1-wire
Short-circuit-proof	thermal
Non reactive	yes
Module diagnosis	yes
Individual channel diagnosis	no
Shut-down energy (inductive)	150 mJ / channel
Response time of protective circuit (current limitation)	< 100 $\mu$ s
General data	
Weight	89 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

## Ordering data

Module variants	
Digital output module, 16 channels	

## Accessories

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

## UR20-16DO-N

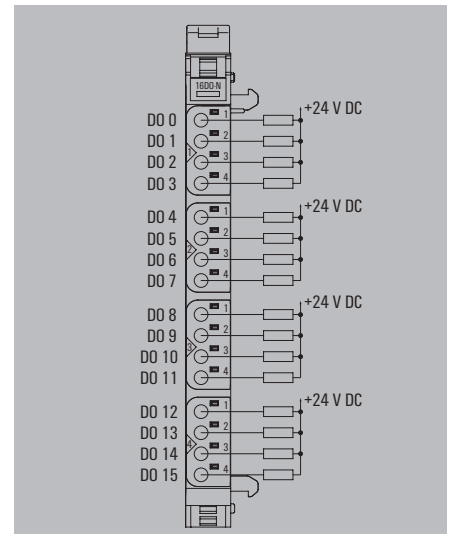


u-remote system bus	
48 Mbps	
DC 500 V between current paths	
24 V DC +20 % / -15 % via the system bus	
8 mA	
15 mA + load	
16, N-switching	
ohmic, inductive, lamp load	
100 $\mu$ s	
250 $\mu$ s	
0.5 A	
8 A	
1 kHz	
2 Hz	
10 Hz	
1-wire	
thermal	
yes	
yes	
no	
150 mJ / channel	
< 100 $\mu$ s	
89 g	
120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm	

Type	Qty.	Order No.
UR20-16DO-N	1	1315440000

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1315440000-SP	1	1346980000
UR20-BM-SP	5	1350930000
UR20-PK-1315440000-SP	5	2000520000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL (in preparation)	UL 61010-2-201
MSIP (in preparation)	MSIP-REM-WMG-1315440000



Let's connect.



16DO-N-PLC-INT

- 16 digital outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- For connecting a PLC interface element
- Negative switching
- DC-13 load
- IEC 61131-2 compliant

UR20-16DO-N-PLC-INT



Technical data

<b>System data</b>	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
<b>Supply</b>	
Voltage supply	24 V DC +20 % / -15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>OUT</sub> external)	30 mA + load, power supply via feed-in plug or PLC connection
<b>Digital outputs</b>	
Number, Type	16, N-switching
Type of load	ohmic, inductive, lamp load
Response time, high	100 µs
Response time, low	250 µs
Output current per channel, max.	0.5 A
Output current per module, max.	8 A (2 A with supply via a flat ribbon cable)
Switching frequency max.	
	1 kHz
	2 Hz
	10 Hz
Actuator connection	PLC interface
Short-circuit-proof	thermal
Non reactive	yes
Module diagnosis	yes
Individual channel diagnosis	no
Shut-down energy (inductive)	150 mJ / channel
Response time of protective circuit (current limitation)	< 100 µs
<b>General data</b>	
Weight	83 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

<b>u-remote system bus</b>		
Interface	u-remote system bus	
Transmission rate of system bus	48 Mbps	
Galvanic isolation	DC 500 V between current paths	
<b>Supply</b>		
Voltage supply	24 V DC +20 % / -15 % via the system bus	
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA	
Current consumption (I <sub>OUT</sub> external)	30 mA + load, power supply via feed-in plug or PLC connection	
<b>Digital outputs</b>		
Number, Type	16, N-switching	
Type of load	ohmic, inductive, lamp load	
Response time, high	100 µs	
Response time, low	250 µs	
Output current per channel, max.	0.5 A	
Output current per module, max.	8 A (2 A with supply via a flat ribbon cable)	
Switching frequency max.		
	1 kHz	
	2 Hz	
	10 Hz	
Actuator connection	PLC interface	
Short-circuit-proof	thermal	
Non reactive	yes	
Module diagnosis	yes	
Individual channel diagnosis	no	
Shut-down energy (inductive)	150 mJ / channel	
Response time of protective circuit (current limitation)	< 100 µs	
<b>General data</b>		
Weight	83 g	
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm	

Ordering data

<b>Module variants</b>	
Digital output module, 16 channels, PLC interface	

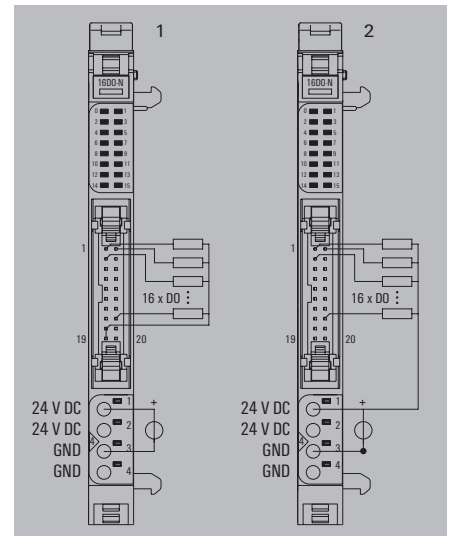
Type	Qty.	Order No.
UR20-16DO-N-PLC-INT	1	1315450000

Accessories

<b>Coding elements</b>	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
PLC interface element	
Pre-assembled cable, 1m	
<b>Replacement parts</b>	
Electronics module	
Basic module	
Plug-in connector unit	
<b>Note</b>	

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
RS 16IO 1W H S	1	9445700000
PAC-UNIV-HE20-LCH-1M	1	7789306010
UR20-EM-1315450000-SP	1	1346990000
UR20-BM-SP	5	1350930000
UR20-PK-1315450000-SP	5	2000540000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX (in preparation)	EN 60079
UL (in preparation)	UL 61010-2-201
MSIP (in preparation)	MSIP-REM-WMG-1315450000



Let's connect.

**4RO-SSR-255**

- 4 digital outputs
- Can be loaded up to 1 A per channel
- Solid-state relay

**UR20-4RO-SSR-255**



**Technical data**

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>IN</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>OUT</sub> in the respective power segment)	< 15 mA
Digital outputs	
Number	4
Type	SSR /Triac
Response time, high	max. 20 ms, zero-crossing-detection
Response time, low	max. 20 ms, zero-crossing-detection
Output current per channel, max.	1 A*
Output current per module, max.	4 A*
Switching frequency max.	40 Hz
Short-circuit-proof	no
Non reactive	yes
Switching voltage max.	277 V AC *
Module diagnosis	yes
Individual channel diagnosis	no
General data	
Weight	83 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

u-remote system bus	
48 Mbps	
DC 500 V between current paths	
24 V DC +20 % / - 15 % via the system bus	
8 mA	
< 15 mA	
4	
SSR /Triac	
max. 20 ms, zero-crossing-detection	
max. 20 ms, zero-crossing-detection	
1 A*	
4 A*	
40 Hz	
no	
yes	
277 V AC *	
yes	
no	
83 g	
120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm	

\*) For this and additional technical data, please refer to the manual available at [www.weidmuller.de](http://www.weidmuller.de) or scan the QR code below.

**Ordering data**

Module variants	
Digital output module, 4 channels, SSR	

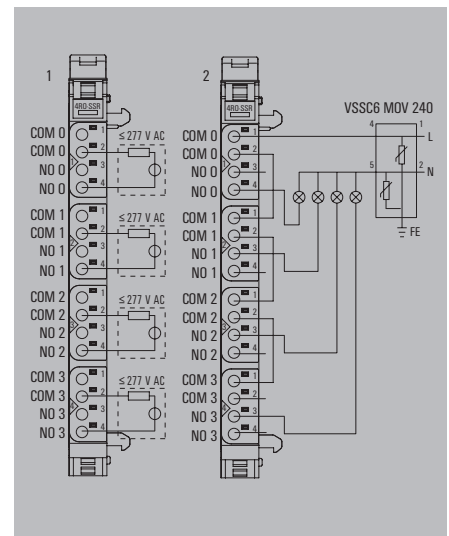
Type	Qty.	Order No.
UR20-4RO-SSR-255	1	1315540000

**Accessories**

Accessories	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
KDSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1315540000-SP	1	1347120000
UR20-BM-SP	5	1350930000
UR20-PK-1315540000-SP	5	1484000000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315540000



Let's connect.

4R0-C0-255

- 4 digital outputs
- Can be loaded up to 6 A per channel
- Relay output, change-over contact
- Switching voltage 277 V AC/DC

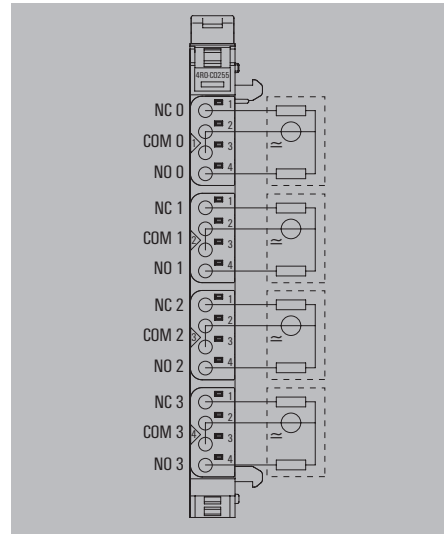
UR20-4R0-C0-255



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>IN</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>OUT</sub> in the respective power segment)	< 15 mA
Digital outputs	
Number	4
Type	Change-over contact
Response time, high	20 ms
Response time, low	20 ms
Output current per channel, max.	5 A at 60 °C / 6 A at 55 °C*
Output current per module, max.	20 A at 60 °C / 24 A at 55 °C*
Switching frequency max.	5 Hz
Short-circuit-proof	no
Non reactive	yes
Switching voltage max.	277 V AC/DC *
Module diagnosis	yes
Individual channel diagnosis	no
General data	
Weight	83 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

u-remote system bus	
48 Mbps	
DC 500 V between current paths	
24 V DC +20 % / - 15 % via the system bus	
8 mA	
< 15 mA	
4	
Change-over contact	
20 ms	
20 ms	
5 A at 60 °C / 6 A at 55 °C*	
20 A at 60 °C / 24 A at 55 °C*	
5 Hz	
no	
yes	
277 V AC/DC *	
yes	
no	
83 g	
120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm	
*) For this and additional technical data, please refer to the manual available at <a href="http://www.weidmueller.de">www.weidmueller.de</a> or scan the QR code below.	



Ordering data

Module variants	
Digital output module, 4 channels, relay	

Type	Qty.	Order No.
UR20-4R0-C0-255	1	1315550000

Accessories

Accessories	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1315550000-SP	1	1347130000
UR20-BM-SP	5	1350930000
UR20-PK-1315550000-SP	5	1346500000
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty.		
* <sup>2)</sup> 1 sheet = 60 label = 1 Qty.		

Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315550000



Let's connect.



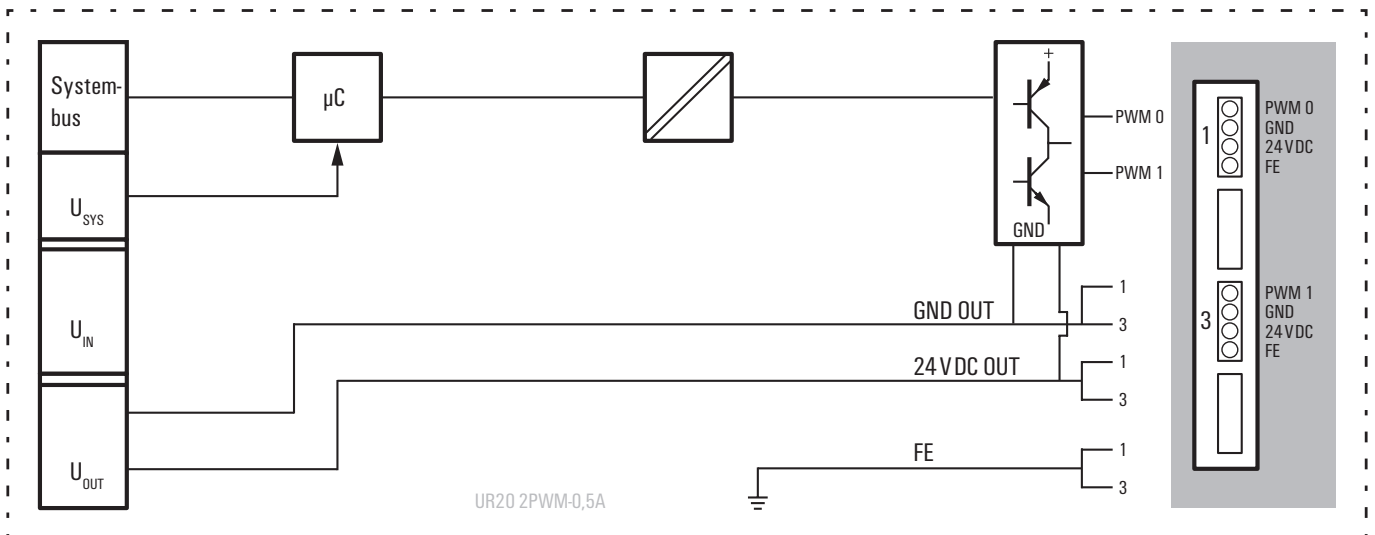
# Pulse width modulation modules

Frequency can be adjusted up to 40 kHz;  
short-circuit-proof; two PWM outputs

As part of the new u-remote system, Weidmüller provides a specialised solution for controlling small motors with current requirements of 0.5 A to 2 A which can also be used to control valve flaps. Here, not only can the switching frequencies be set up to 40 kHz, the push/pull output levels can also be used for motor activation, for example, to change direction of rotation. As with all modules in the u-remote system, the characteristics are outstanding – from the modular design and interchangeable electronics to the removable and plug-in terminal strip.

The module electronics supply the connected actuators from the output current path ( $U_{OUT}$ ).

UR20-2PWM-PN-0.5A block diagram example



## 2PWM-PN-0.5A

- 2 pulse width modulation module outputs
- Can be loaded up to 0.5 A per channel
- Short-circuit-proof
- Push/pull output
- Maximum 40 kHz output frequency (adjustable)

## UR20-2PWM-PN-0.5A



### Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption ( $I_{IN}$ in power segment of field bus coupler), typ.	8 mA
Current consumption ( $I_{OUT}$ in the respective power segment)	40 mA + Load
Digital outputs	
Number	2
Type	PWM push/pull output stage
Resolution	32 Bit
Accuracy	1 Bit
Response time, high	< 100 ns
Response time, low	< 100 ns
Output current per channel, max.	0.5 A
Output current per module, max.	1 A
Switching frequency max.	
	Resistive load (min. 47 $\Omega$ )
	Inductive load (DC 13)
	Lamp load (12 W)
Actuator connection	yes
Short-circuit-proof	yes
Module diagnosis	yes
Individual channel diagnosis	no
Non reactive	yes
Pulse duty factor	0 - 100 % push/pull or push parameterisable
General data	
Weight	77 g
Dimensions (H/W/D)	120 mm (with catch lever) x 11,5 mm x 76 mm

Type	Qty.	Order No.
UR20-2PWM-PN-0.5A	1	131560000

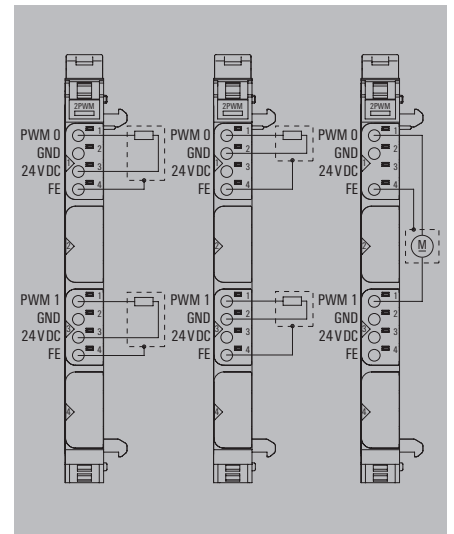
### Ordering data

Module variants	
Digital output module, PWM, 2 channels, 0.5 A	

### Accessories

Coding elements	KDSM BHZ5.00	100	1483050000
Termination kit	UR20-EBK-ACC	5	1346610000
Swivel marker	UR20-SM-ACC	20	1339920000
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR	192	1323700000
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS	960	1323710000
Module marker for custom printing	DEK 5/8-11.5 MC SDR	100	1341610000
Module marker for neutral	DEK 5/8-11.5 MC NE WS	500	1341630000
Thermotransfer version (Material: Polyester)	THM UR20 GE * <sup>1)</sup>	1	1429910000
Thermotransfer version (Material: Polyester)	THM UR20 WS * <sup>1)</sup>	1	1429420000
Paper version for Laserprinter	ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
Replacement parts			
Electronics module	UR20-EM-1315600000-SP	1	1347180000
Basic module	UR20-BM-SP	5	1350930000
Plug-in connector unit	UR20-PK-1315600000-SP	5	1484010000
Note			

Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315600000



Let's connect.

2PWM-PN-2A

- 2 pulse width modulation module outputs
- Can be loaded up to 2 A per channel
- Short-circuit-proof
- Push/pull output
- Maximum 40 kHz output frequency (adjustable)

UR20-2PWM-PN-2A



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>in</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>out</sub> in the respective power segment)	40 mA + Load
Digital outputs	
Number	2
Type	DO PWM push/pull output stage
Resolution	32 Bit
Accuracy	1 Bit
Response time, high	< 100 ns
Response time, low	< 100 ns
Output current per channel, max.	2 A
Output current per module, max.	4 A
Switching frequency max.	
	static, 6 Hz to 40 kHz
	inductive load (min. 47 Ω)
	static, 6 Hz to 40 kHz
	lamp load (12 W)
static, 6 Hz to 40 kHz	
Actuator connection	yes
Short-circuit-proof	yes
Module diagnosis	yes
Individual channel diagnosis	no
Non reactive	yes
Pulse duty factor	0 - 100 % push/pull or push parameterisable
General data	
Weight	82 g
Dimensions (H/W/D)	120 mm (with catch lever) 128 mm x 11,5 mm x 76 mm

Type	Qty.	Order No.
UR20-2PWM-PN-2A	1	1315610000

Ordering data

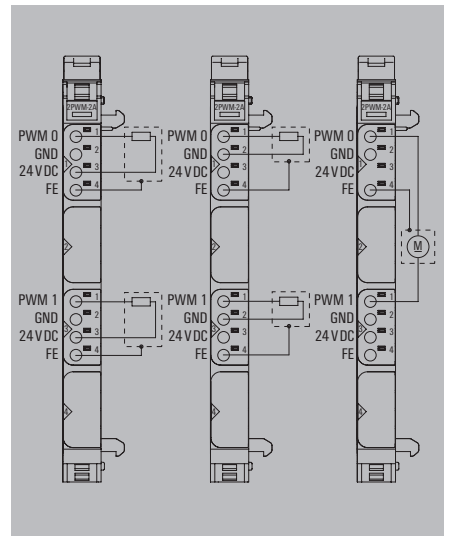
Module variants	
Digital output module, PWM, 2 channels, 2 A	

Accessories

Coding elements	
Termination kit	UR20-EBK-ACC
Swivel marker	UR20-SM-ACC
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS
Module marker for custom printing	DEK 5/8-11.5 MC SDR
Module marker for neutral	DEK 5/8-11.5 MC NE WS
Thermotransfer version (Material: Polyester)	THM UR20 GE * <sup>1)</sup>
Thermotransfer version (Material: Polyester)	THM UR20 WS * <sup>1)</sup>
Paper version for Laserprinter	ESO UR20 DIN A4 WS * <sup>2)</sup>
Replacement parts	
Electronics module	UR20-EM-1315610000-SP
Basic module	UR20-BM-SP
Plug-in connector unit	UR20-PK-1315610000-SP
Note	

Type	Qty.	Order No.
KDSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1315610000-SP	1	1347190000
UR20-BM-SP	5	1350930000
UR20-PK-1315610000-SP	5	1346550000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315610000



Let's connect.





# Analogue input modules

Input parameters can be set for current or voltage; up to 3-wire+FE; Accuracy 0.1% FSR

IP20  
A

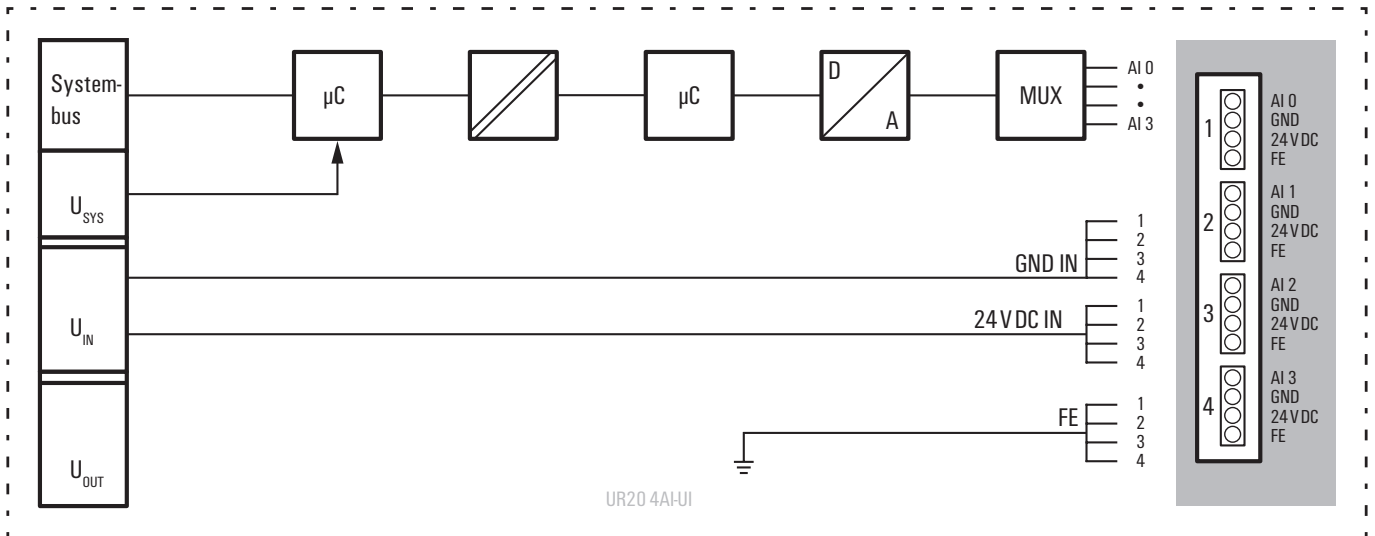
Analogue input modules of the u-remote system are available in many variants with different resolutions and wiring solutions.

Variants are available in a 12- and 16-bit resolution, which record up to 4 analogue sensors with +/-10 V, +/-5 V, 0... 10 V, 0...5 V, 2... 10 V, 1...5 V, 0...20 mA or 4...20 mA with maximum accuracy. Each plug-in connector has options for connecting sensors with 2-wire, 3-wire and 3-wire+FE technology. The parameters for the measurement range can be individually set for each channel. A separate status LED is also assigned to each channel.

A special variant for Weidmüller interface units enables current measurements with a 16-bit resolution at maximum accuracy for 8 sensors at a time (0...20 mA or 4...20 mA).

The module electronics supply the connected sensors from the input current path ( $U_{IN}$ ).

### UR20-4AI-UI-16 block diagram example



4AI-UI-12

- 4 analogue inputs
- Parameterisable inputs (voltage, current)
- 12-bit resolution
- 2-wire, 3-wire and 3-wire+FE connection
- Accuracy 0.25 % FSR

UR20-4AI-UI-12



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / -15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	25 mA + sensor feed
Analogue inputs	
Number	4
Input	1. Voltage (0...5 V, ±5 V, 0...10 V, ±10 V, 1...5 V, 2...10 V) 2. Current (0...20 mA, 4...20 mA)
Resolution	12 Bit
Accuracy	0,25 % FSR
Sensor supply	yes
Sensor connection	2-wire, 3-wire, 3-wire+FE
Conversion time	1 ms
Internal resistance U	100 kΩ
Internal resistance I	41.2 Ω
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
Short-circuit-proof	yes
General data	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever) 128 mm) x 11,5 mm x 76 mm

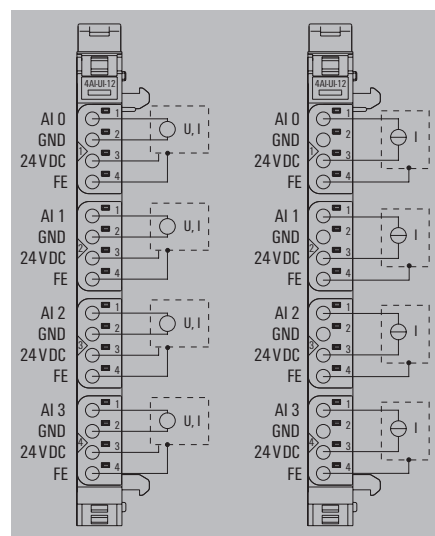
Type	Qty.	Order No.
UR20-4AI-UI-12	1	1394390000

Ordering data

Module variants	
Analogue input module, 4 channels, 12 bits	

Accessories

Coding elements	KDSM BHZ5.00	100	1483050000
Termination kit	UR20-EBK-ACC	5	1346610000
Swivel marker	UR20-SM-ACC	20	1339920000
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR	192	1323700000
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS	960	1323710000
Module marker for custom printing	DEK 5/8-11.5 MC SDR	100	1341610000
Module marker for neutral	DEK 5/8-11.5 MC NE WS	500	1341630000
Thermotransfer version (Material: Polyester)	THM UR20 GE * <sup>1)</sup>	1	1429910000
Thermotransfer version (Material: Polyester)	THM UR20 WS * <sup>1)</sup>	1	1429420000
Paper version for Laserprinter	ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
Replacement parts			
Electronics module	UR20-EM-1394390000-SP	1	1434230000
Basic module	UR20-BM-SP	5	1350930000
Plug-in connector unit	UR20-PK-1394390000-SP	5	1484030000
Note			
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty. * <sup>2)</sup> 1 sheet = 60 label = 1 Qty.			



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1394390000



Let's connect.

4AI-UI-16

- 4 analogue inputs
- Parameterisable inputs (voltage, current)
- 16-bit resolution
- 2-wire, 3-wire and 3-wire+FE connection
- Accuracy 0.1 % FSR

UR20-4AI-UI-16



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / -15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	25 mA + sensor feed
Analogue inputs	
Number	4
Input	1. Voltage (0...5 V, ±5 V, 0...10 V, ±10 V, 1...5 V, 2...10 V) 2. Current (0...20 mA, 4...20 mA)
Resolution	16 Bit
Accuracy	0.1 % FSR
Sensor supply	yes
Sensor connection	2-wire, 3-wire, 3-wire+FE
Conversion time	1 ms
Internal resistance U	100 kΩ
Internal resistance I	41.2 Ω
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
Short-circuit-proof	yes
General data	
Weight	89 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

Ordering data

Module variants	
Analogue input module, 4 channels, 16 bits	

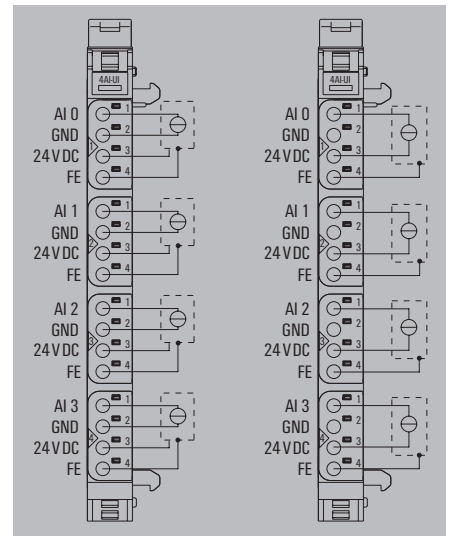
Type	Qty.	Order No.
UR20-4AI-UI-16	1	1315620000

Accessories

Replacement parts	
Electronics module	UR20-EM-1315620000-SP
Basic module	UR20-BM-SP
Plug-in connector unit	UR20-PK-1315620000-SP
Note	

Type	Qty.	Order No.
KDSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315620000



Let's connect.

### 4AI-UI-16-DIAG

- Advanced diagnosis functions
- 4 analogue inputs
- Parameterisable inputs (voltage, current)
- 16-bit resolution
- 2-wire, 3-wire and 3-wire+FE connection
- Accuracy 0.1 % FSR

### UR20-4AI-UI-16-DIAG



#### Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / -15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	25 mA + sensor feed
Analogue inputs	
Number	4
Input	1. Voltage (0...5 V, ±5 V, 0...10 V, ±10 V, 1...5 V, 2...10 V) 2. Current (0...20 mA, 4...20 mA)
Resolution	16 Bit
Accuracy	0.1 % FSR
Sensor supply	yes
Sensor connection	2-wire, 3-wire, 3-wire+FE
Conversion time	1 ms
Internal resistance U	100 kΩ
Internal resistance I	approx. 45 Ω
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	yes
Short-circuit-proof	yes
General data	
Weight	89 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

#### Ordering data

Module variants	
Analogue input module, 4 channels, 16 bits, diagnosis functions	

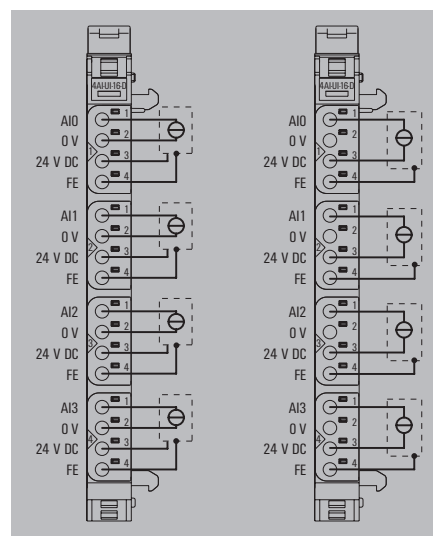
Type	Qty.	Order No.
UR20-4AI-UI-16-DIAG	1	1315690000

#### Accessories

Replacement parts	
Electronics module	UR20-EM-1315690000-SP
Basic module	UR20-BM-SP
Plug-in connector unit	UR20-PK-1315690000-SP
Note	

Type	Qty.	Order No.
KDSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315690000

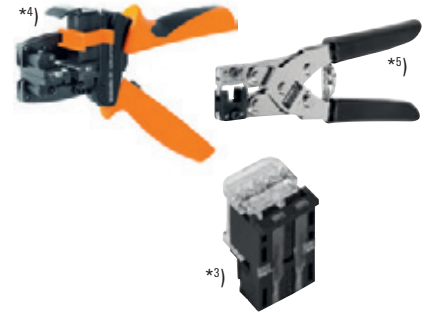


Let's connect.

4AI-UI-16-HD

- 4 plugs with 4 connections per module
- 4 analogue inputs
- Parameterisable inputs (voltage, current)
- 16-bit resolution
- 2-wire, 3-wire and 3-wire+FE connection
- Accuracy 0.1 % FSR

UR20-4AI-UI-16-HD



Note: Please order connector separately

Technical data

System data

Interface  
Transmission rate of system bus  
Galvanic isolation

Supply

Voltage supply  
Current consumption ( $I_N$  in power segment of field bus coupler), typ.  
Current consumption ( $I_N$  in the respective power segment)

Analogue inputs

Number  
Input  
  
Resolution  
Accuracy  
Sensor supply  
Sensor connection  
Conversion time  
Internal resistance U  
Internal resistance I  
Reverse polarity protection  
Module diagnosis  
Individual channel diagnosis  
Short-circuit-proof

General data

Weight  
Dimensions (H/W/D)

u-remote system bus  
48 Mbps  
DC 500 V between current paths

24 V DC +20 % / -15 % via the system bus  
8 mA  
25 mA + sensor feed

4  
1. Voltage (0...5 V, ±5 V, 0...10 V, ±10 V, 1...5 V, 2...10 V)  
2. Current (0...20 mA, 4...20 mA)  
16 Bit  
0.1 % FSR  
yes  
2-wire, 3-wire, 3-wire+FE  
1 ms  
100 kΩ  
approx. 45 Ω  
yes  
yes  
no  
yes

Ordering data

Module variants

Analogue input module, 4 channels, 16 bits, HD plug

Type	Qty.	Order No.
UR20-4AI-UI-16-HD	1	1506920000

Accessories

Coding elements  
Termination kit  
Swivel marker  
\*3) HD-Plug  
\*4) Stripping tool  
\*5) Pressing tool  
Module marker for custom printing  
Module marker for neutral  
Thermotransfer version (Material: Polyester)  
Thermotransfer version (Material: Polyester)  
Paper version for Laserprinter

Type	Qty.	Order No.
KDSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
UR20-PGO.35	8	1469340000
multi-stripax 6-16	1	9202210000
PWZ-UR20-HD	1	1525820000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE *1)	1	1429910000
THM UR20 WS *1)	1	1429420000
ESD UR20 DIN A4 WS *2)	10	1429430000

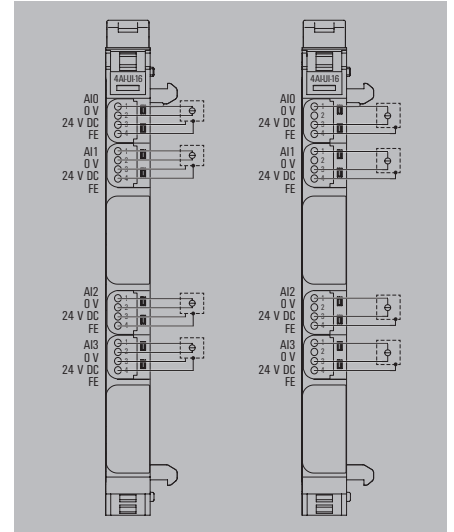
Replacement parts

Electronics module  
Basic module  
Plug-in connector unit

UR20-EM-1506920000-SP	1	1515420000
UR20-BM-SP	5	1350930000
UR20-PK-1506920000-SP	5	1518830000

Note

\*1) 1 roll = 1000 label = 1 Qty.  
\*2) 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1506920000



Let's connect.

### 4AI-UI-16-DIAG-HD

- 4 plugs with 4 connections per module
- Advanced diagnosis functions
- 4 analogue inputs
- Parameterisable inputs (voltage, current)
- 16-bit resolution
- 2-wire, 3-wire and 3-wire+FE connection
- Accuracy 0.1 % FSR

### Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / -15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	25 mA + sensor feed
Analogue inputs	
Number	4
Input	1. Voltage (0...5 V, ±5 V, 0...10 V, ±10 V, 1...5 V, 2...10 V) 2. Current (0...20 mA, 4...20 mA)
Resolution	16 Bit
Accuracy	0.1 % FSR
Sensor supply	yes
Sensor connection	2-wire, 3-wire, 3-wire+FE
Conversion time	1 ms
Internal resistance U	100 kΩ
Internal resistance I	approx. 45 Ω
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	yes
Short-circuit-proof	yes
General data	
Weight	89 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

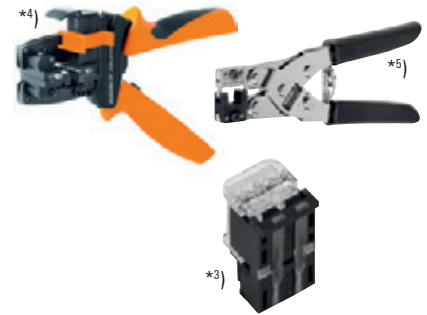
### Ordering data

Module variants	
Analogue input module, 4 channels, 16 bits, diagnosis functions, HD plug	

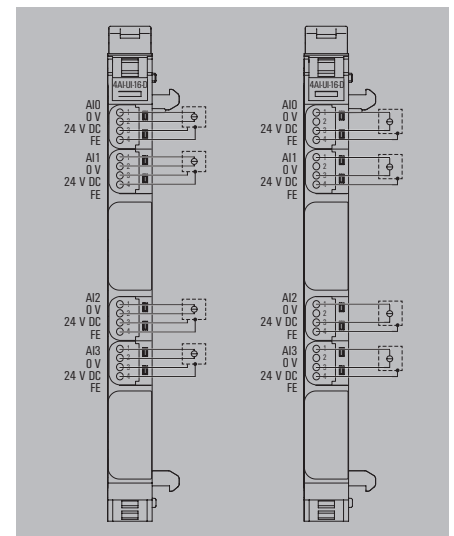
### Accessories

Coding elements	
Termination kit	
Swivel marker	
*3) HD-Plug	
*4) Stripping tool	
*5) Pressing tool	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

### UR20-4AI-UI-16-DIAG-HD



Note: Please order connector separately



Type	Qty.	Order No.
UR20-4AI-UI-16-DIAG-HD	1	1506910000

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
UR20-PGO.35	8	1469340000
multi-stripax 6-16	1	9202210000
PWZ-UR20-HD	1	1525820000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE *1)	1	1429910000
THM UR20 WS *1)	1	1429420000
ESO UR20 DIN A4 WS *2)	10	1429430000
UR20-EM-1506910000-SP	1	1515430000
UR20-BM-SP	5	1350930000
UR20-PK-1506910000-SP	5	1518820000

\*1) 1 roll = 1000 label = 1 Qty.  
\*2) 1 sheet = 60 label = 1 Qty.

Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1506910000



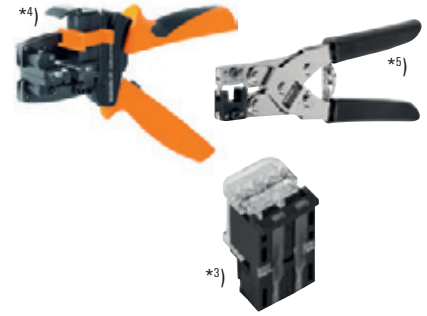
Let's connect.



8AI-I-16-HD

- 8 plugs with 4 connections per module
- 8 analogue inputs
- Parameterisable inputs (voltage, current)
- 16-bit resolution
- 2-wire, 3-wire and 3-wire+FE connection
- Accuracy 0.1 % FSR
- HD plug

UR20-8AI-I-16-HD



Note: Please order connector separately

Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	500 V DC between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>IN</sub> in the respective power segment)	20 mA + sensor feed
Analogue inputs	
Number	8
Input	Current (0...20 mA, 4...20 mA)
Resolution	16 Bit
Accuracy	0.1 % FSR
Sensor supply	yes
Sensor connection	2-wire, 3-wire, 3-wire+FE
Conversion time	1 ms
Internal resistance I	approx. 45 Ω
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
Short-circuit-proof	yes
General data	
Weight	73 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Type	Qty.	Order No.
UR20-8AI-I-16-HD	1	1315650000

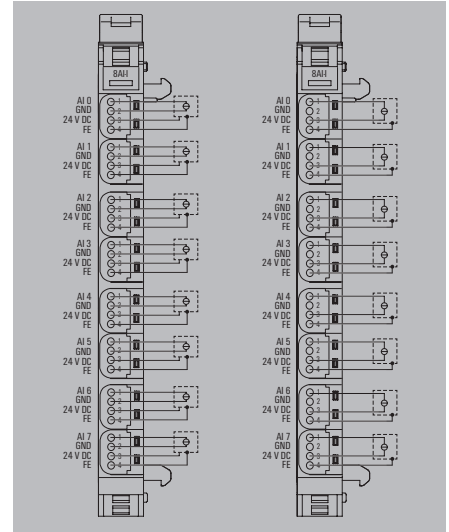
Ordering data

Module variants	
Analogue output module, 8 channels, 16 Bits, HD-plug	

Accessories

Accessories	
Coding elements	KDSM BHZ5.00
Termination kit	UR20-EBK-ACC
Swivel marker	UR20-SM-ACC
*3) HD-Plug	UR20-PGO.35
*4) Stripping tool	multi-stripax 6-16
*5) Pressing tool	PWZ-UR20-HD
Module marker for custom printing	DEK 5/8-11.5 MC SDR
Module marker for neutral	DEK 5/8-11.5 MC NE WS
Thermotransfer version (Material: Polyester)	THM UR20 GE *1)
Thermotransfer version (Material: Polyester)	THM UR20 WS *1)
Paper version for Laserprinter	ESD UR20 DIN A4 WS *2)
Replacement parts	
Electronics module	UR20-EM-1315650000-S
Basic module	UR20-BM-SP
Plug-in connector unit	UR20-PK-1315650000-SP
Note	

Type	Qty.	Order No.
KDSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
UR20-PGO.35	8	1469340000
multi-stripax 6-16	1	9202210000
PWZ-UR20-HD	1	1525820000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE *1)	1	1429910000
THM UR20 WS *1)	1	1429420000
ESD UR20 DIN A4 WS *2)	10	1429430000
UR20-EM-1315650000-S	1	1347240000
UR20-BM-SP	5	1350930000
UR20-PK-1315650000-SP	5	1559740000
*1) 1 roll = 1000 label = 1 Qty. *2) 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315650000

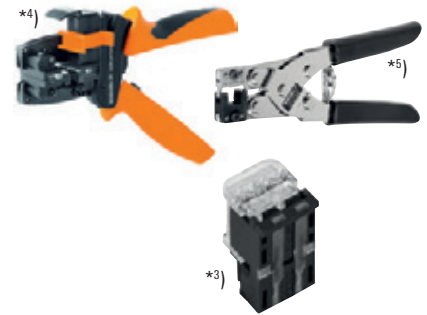


Let's connect.

### 8AI-I-16-DIAG-HD

- 8 plugs with 4 connections per module
- Advanced diagnosis functions
- 8 analogue inputs
- Parameterisable inputs (voltage, current)
- 16-bit resolution
- 2-wire, 3-wire and 3-wire+FE connection
- Accuracy 0.1 % FSR

### UR20-8AI-I-16-DIAG-HD



Note: Please order connector separately

#### Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>IN</sub> in the respective power segment)	20 mA + sensor feed
Analogue inputs	
Number	8
Input	Current (0...20 mA, 4...20 mA)
Resolution	16 Bit
Accuracy	0.1 % FSR
Sensor supply	yes
Sensor connection	2-wire, 3-wire, 3-wire+FE
Conversion time	1 ms
Internal resistance I	approx. 45 Ω
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	yes
Short-circuit-proof	yes
General data	
Weight	73 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Type	Qty.	Order No.
UR20-8AI-I-16-DIAG-HD	1	1315720000

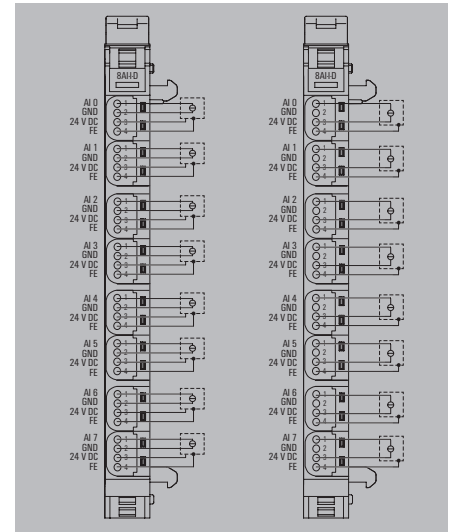
#### Ordering data

Module variants	
Analogue output module, 4 channels, 16 Bits, diagnosis functions, HD-plug	

#### Accessories

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
UR20-PGO.35	8	1469340000
multi-stripax 6-16	1	9202210000
PWZ-UR20-HD	1	1525820000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
Replacement parts		
Electronics module	UR20-EM-1315720000-SP	1 1347320000
Basic module	UR20-BM-SP	5 1350930000
Plug-in connector unit	UR20-PK-1315720000-SP	5 1559750000
Note		

Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315720000



Let's connect.

8AI-PLC-INT

- 8 analogue inputs
- Rapid cabling with flat ribbon cable
- 0/4 to 20 mA with 0.1 % accuracy with a 16-bit resolution
- Inputs can be parameterised (passive or active operating mode)

UR20-8AI-PLC-INT



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> external)	20 mA
Analogue inputs	
Number	8
Input	Current input
Resolution	16 Bit
Accuracy	0.1 % FSR
Sensor supply	external
Sensor connection	PLC interface
Conversion time	1 ms
Internal resistance I	approx. 50 Ω
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
Short-circuit-proof	yes
General data	
Weight	73 g
Dimensions (H/W/D)	120 mm (with catch lever) 128 mm x 11,5 mm x 76 mm

System data		
Interface	u-remote system bus	
Transmission rate of system bus	48 Mbps	
Galvanic isolation	DC 500 V between current paths	
Supply		
Voltage supply	24 V DC +20 % / - 15 % via the system bus	
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA	
Current consumption (I <sub>N</sub> external)	20 mA	
Analogue inputs		
Number	8	
Input	Current input	
Resolution	16 Bit	
Accuracy	0.1 % FSR	
Sensor supply	external	
Sensor connection	PLC interface	
Conversion time	1 ms	
Internal resistance I	approx. 50 Ω	
Reverse polarity protection	yes	
Module diagnosis	yes	
Individual channel diagnosis	no	
Short-circuit-proof	yes	
General data		
Weight	73 g	
Dimensions (H/W/D)	120 mm (with catch lever) 128 mm x 11,5 mm x 76 mm	

Ordering data

Module variants	
Analogue input module, 8 channels, PLC interface	

Type	Qty.	Order No.
UR20-8AI-PLC-INT	1	1315670000

Accessories

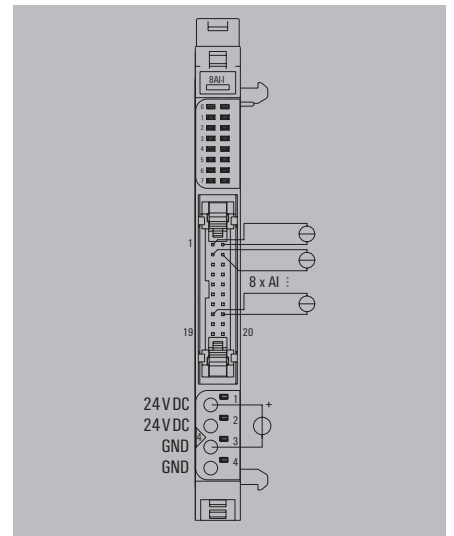
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	

Type	Qty.	Order No.
KDSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
PLC interface element	
Pre-assembled cable, 1m	
Note	

UR20-EM-1315670000-SP	1	1347250000
UR20-BM-SP	5	1350930000
UR20-PK-1315670000-SP	5	1483950000
RS 16IO 1W H S	1	9445700000
PAC-UNIV-HE20-LCH-1M	1	7789306010

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315670000



Let's connect.

**4AI-UI-DIF-16-DIAG**

- 4 differential analog inputs
- Advanced diagnosis functions
- Parameterizable inputs (voltage, current)
- 16-bit resolution
- 2-wire, 3-wire and 4-wire
- Accuracy 0.1% FSR

**UR20-4AI-UI-DIF-16-DIAG**



**Technical data**

<b>System data</b>	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths 500 V DC between the channels and the supply
<b>Supply</b>	
Voltage supply	24 V DC +20 % / -15 % via the system bus
Current consumption (I <sub>IN</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>IN</sub> in the respective power segment)	33 mA + sensor feed
<b>Analogue inputs</b>	
Number	8
Input	1. Voltage (0 ... 5 V, ±5 V, 0 ... 10 V, ±10 V, 1 ... 5 V, 2 ... 10 V) 2. Current (0 ... 20 mA, 4 ... 20 mA)
Resolution	16 Bit
Accuracy	0.1% FSR at 25 °C 50 ppm /K max. temperature coefficient
Sensor supply	yes (not galvanically isolated)
Sensor supply (Current)	max. 500 mA
Sensor connection	2-wire, 3-wire and 4-wire
Input Type	differential input
Common-mode ratio	± 30 V
Conversion time	1 ms
Internal resistance I	approx. 18 Ω (current), 100 k (voltage)
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	yes
Short-circuit-proof	yes
<b>General data</b>	
Weight	91 g
Dimensions (H/W/D)	120 mm (with catch lever) 128 mm x 11.5 mm x 76 mm

<b>u-remote system bus</b>		
48 Mbps		
DC 500 V between current paths 500 V DC between the channels and the supply		
24 V DC +20 % / -15 % via the system bus		
8 mA		
33 mA + sensor feed		
8		
1. Voltage (0 ... 5 V, ±5 V, 0 ... 10 V, ±10 V, 1 ... 5 V, 2 ... 10 V) 2. Current (0 ... 20 mA, 4 ... 20 mA)		
16 Bit		
0.1% FSR at 25 °C 50 ppm /K max. temperature coefficient		
yes (not galvanically isolated)		
max. 500 mA		
2-wire, 3-wire and 4-wire		
differential input		
± 30 V		
1 ms		
approx. 18 Ω (current), 100 k (voltage)		
yes		
yes		
yes		
yes		
<b>General data</b>		
91 g		
120 mm (with catch lever) 128 mm x 11.5 mm x 76 mm		

**Ordering data**

<b>Module variants</b>	
Analogue output module, 4 channels, 16 Bits, diagnosis functions, Differential inputs	

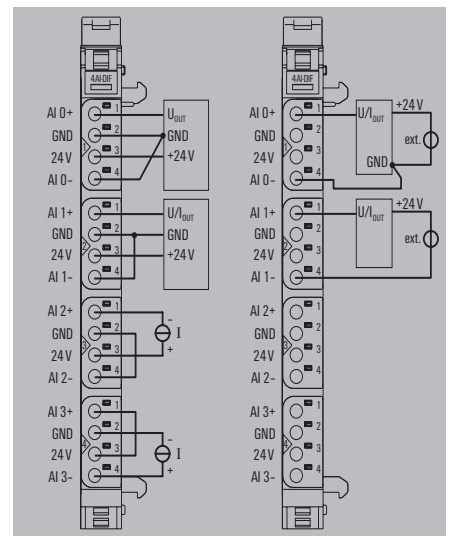
Type	Qty.	Order No.
UR20-4AI-UI-DIF-16-DIAG	1	1993880000

**Accessories**

<b>Coding elements</b>	
Termination kit	UR20-EBK-ACC
Swivel marker	UR20-SM-ACC
Terminal markers for custom printing	PM 2.7/2.6 MC SDR
Terminal markers for Pusher Neutral	PM 2.7/2.6 MC NE WS
Module marker for custom printing	DEK 5/8-11.5 MC SDR
Module marker for neutral	DEK 5/8-11.5 MC NE WS
Thermotransfer version (Material: Polyester)	THM UR20 GE * <sup>1)</sup>
Thermotransfer version (Material: Polyester)	THM UR20 WS * <sup>1)</sup>
Paper version for Laserprinter	ESD UR20 DIN A4 WS * <sup>2)</sup>
<b>Replacement parts</b>	
Electronics module	UR20-EM-1993880000-SP
Basic module	UR20-BM-SP
Plug-in connector unit	UR20-PK-1993880000-SP
<b>Note</b>	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1993880000-SP	1	2446190000
UR20-BM-SP	5	1350930000
UR20-PK-1993880000-SP	5	2446200000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Produktnorm	IEC 61131-2
EMV	EN 61000
ATEX (in preparation)	EN 60079
UL (in preparation)	UL 61010-2-201
MSIP (in preparation)	MSIP-REM-WMG-1993880000



Let's connect.

# Temperature modules and potentiometer input module

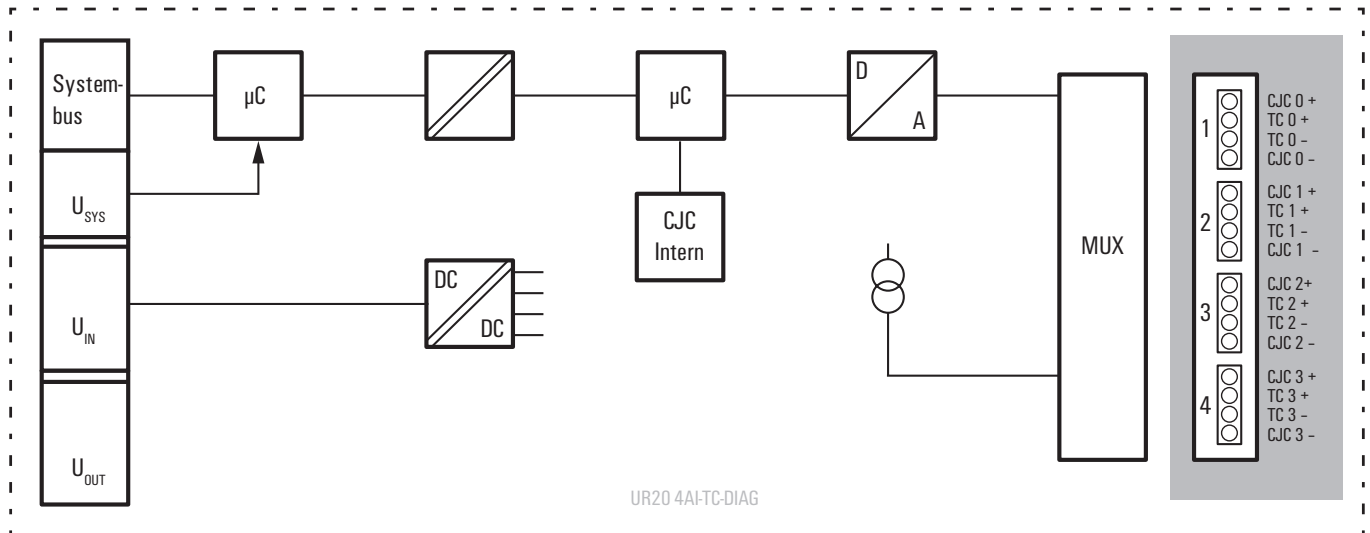
Available for TC and RTD; 16-bit resolution;  
50/60 Hz suppression

IP20  
A

The recording of resistance temperature and thermocoupler sensors is indispensable for many applications. The 4-channel input modules from Weidmüller are designed for all common thermal elements and resistance temperature sensors. With an accuracy of 0.2 % of the measurement range end value and a resolution of 16 bits, cable breaks and instances of the limit value being exceeded or falling below are detected by means of individual channel diagnosis. Additional features such as an automatic 50-Hz to 60-Hz suppression or external as well as internal cold-junction compensation, as are available with the TC module, round off the scope of function.

The potentiometer input module allows direct connection of potentiometers. By integrated reference voltage (+ 10V), a measurement of 300 Ω to 50 kΩ is possible. By a very fast conversion time of up to 500 μs the module is suited for demanding positioning tasks.

UR20-4AI-TC-DIAG block diagram example



### 4AI-TC-DIAG

- 4 analogue inputs
- Various TC sensors
- High accuracy of 0.2 % FSR
- 16-bit resolution
- Individual channel diagnosis
- Internal or external cold-junction compensation possible
- Automatic 50 and 60 Hz suppression

### UR20-4AI-TC-DIAG



#### Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	20 mA
Analogue inputs	
Number	4
Sensor type	J, K, T, B, N, E, R, S, L, U, C, mV
Resolution	16 Bit
Accuracy	0,1 % FSR + 10 µV
Sensor connection	2-wire
Cold-junction compensation	internal and external (int. accuracy ≤ 3 K)
Temperature coefficient	50 ppm/K
Temperature range	-200...+2315 °C
Conversion time	36...240 ms, adjustable
Internal resistance	> 1 MΩ
Module diagnosis	yes
Individual channel diagnosis	yes
Reverse polarity protection	yes
General data	
Weight	86 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

#### Ordering data

Module variants	
Analogue input module, 4 channels, thermocouple	

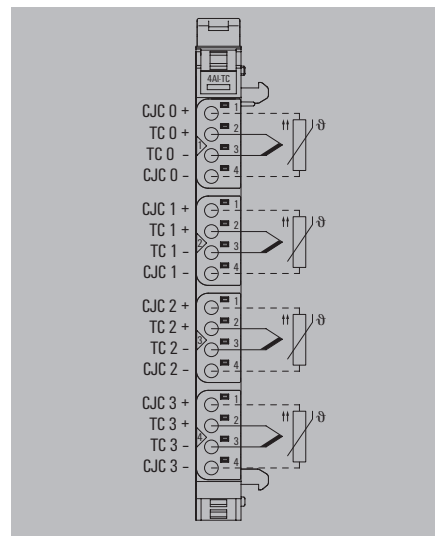
Type	Qty.	Order No.
UR20-4AI-TC-DIAG	1	1315710000

#### Accessories

Accessories	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1315710000-SP	1	1435740000
UR20-BM-SP	5	1350930000
UR20-PK-1315710000-SP	5	1484050000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315710000



Let's connect.

4AI-RTD-DIAG

- 16-bit resolution
- Individual channel diagnosis
- Automatic 50 and 60 Hz suppression
- For 2-, 3- and 4-wire RTDs
- High accuracy
- For virtually all common sensors
- Temperature measurement via resistor

UR20-4AI-RTD-DIAG



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / -15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	20 mA
Analogue inputs	
Number	4
Sensor type	Pt100, Pt200, Pt500, Pt1000, Ni100, Ni120, Ni200, Ni500, Ni1000, Cu10, resistors with 40 Ω, 80 Ω, 150 Ω, 300 Ω, 500 Ω, 1 kΩ, 2 kΩ, 4 kΩ
Resolution	16 Bit
Sensor current	depending on the input type 0,75 mA (Pt100, Ni100, Ni120, Cu10, 40 Ω, 80 Ω, 150 Ω, 300 Ω) or 0,25 mA (Pt200, Pt500, Pt1000, Ni200, Ni500, Ni1000, 500 Ω, 1 kΩ, 2 kΩ, 4 kΩ)
Accuracy	0.2 % FSR, 0.3 % FSR for Ni sensors, 0.6 % FSR for Cu10
Sensor connection	2-wire, 3-wire, 4-wire
Temperature coefficient	50 ppm/K
Temperature range	-200...+850 °C
Conversion time	36...240 ms adjustable
Internal resistance	> 1 MΩ
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	yes
General data	
Weight	91 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

Ordering data

Module variants	
Analogue input module, 4 channels, RTD	

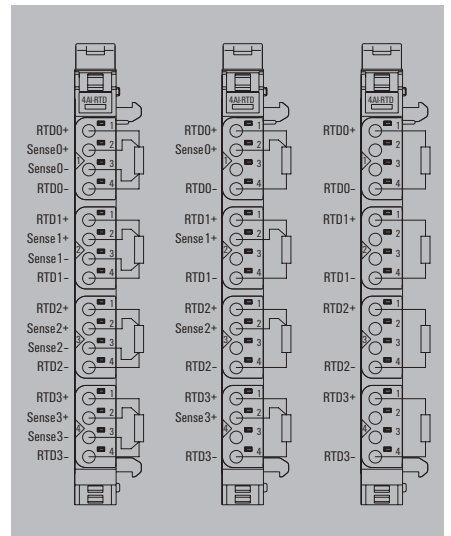
Type	Qty.	Order No.
UR20-4AI-RTD-DIAG	1	1315700000

Accessories

Accessories	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

Replacement parts	
Electronics module	UR20-EM-1315700000-SP 1 1347290000
Basic module	UR20-BM-SP 5 1350930000
Plug-in connector unit	UR20-PK-1315700000-SP 5 1484040000
Note	
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty. * <sup>2)</sup> 1 sheet = 60 label = 1 Qty.	



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315700000



Let's connect.



**4AI-R-HS-16-DIAG**

- 4 potentiometer inputs
- Measuring range from 300 Ω ... 50 kΩ
- 500 μs conversion time
- 16 Bit resolution
- Accuracy <math>\leq \pm 0.25\%</math> FSR
- individual calibration and scaling

**UR20-4AI-R-HS-16-DIAG**



**Technical data**

**System data**

Interface  
Transmission rate of system bus  
Galvanic isolation

**Supply**

Voltage supply  
Current consumption ( $I_{IN}$  in power segment of field bus coupler), typ.  
Current consumption ( $I_{IN}$  in the respective power segment)

**Analogue inputs**

Number  
Sensor type  
Input value  
Measuring range  
Conversion time  
  
Resolution  
Accuracy  
Temperature coefficient  
Input resistor  
Supply voltage  
Current of voltage supply output  
Short circuit detection  
Short-circuit-proof  
Module diagnosis  
Individual channel diagnosis

**General data**

Weight  
Dimensions (H/W/D)

u-remote system bus  
48 Mbps  
500 V DC between current paths  
  
24 V DC +20 % / -15 % via the system bus  
8 mA  
26 mA  
  
4  
3-wire, 3-wire+FE  
Ratiometric potentiometer evaluation with own supply  
300 Ω ... 50 kΩ  
typ. 500 μs (typ. 625 μs at 50 Hz / typ. 521 μs at 60 Hz interference suppression)  
16 Bit  
<math>\leq \pm 0.25\%</math> FSR  
50 ppm/K  
typ. 500 kΩ for sliding-contact connection  
10 V DC  $\pm 10\%$   
max. 0.05 A per channel, total 0.2 A  
yes  
yes  
yes  
line break detected, sensor supply and short-circuit

87 g  
120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

**Ordering data**

**Module variants**

Analog input module for potentiometer, 4 channels, 16 bits

Type	Qty.	Order No.
UR20-4AI-R-HS-16-DIAG	1	2001670000

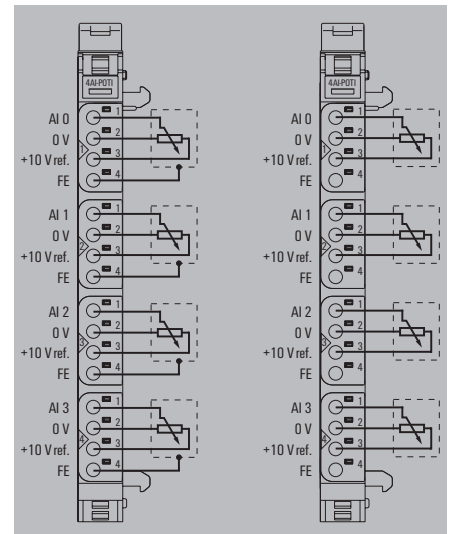
**Accessories**

Coding elements  
Termination kit  
Swivel marker  
Connection marker for pusher custom printing  
Connection marker for pusher neutral  
Module marker for custom printing  
Module marker for neutral  
Thermotransfer version (Material: Polyester)  
Thermotransfer version (Material: Polyester)  
Paper version for Laserprinter

Type	Qty.	Order No.
KDSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

UR20-EM-2001670000-SP	1	2068640000
UR20-BM-SP	5	1350930000
UR20-PK-2001670000-SP	5	2068610000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX (in preparation)	EN 60079
UL (in preparation)	UL 61010-2-201
MSIP (in preparation)	MSIP-REM-WMG-2001670000



Let's connect.

# Power measurement module

## Power measurement via 1- or 3-phase, rated voltage to 300 V<sub>eff</sub>

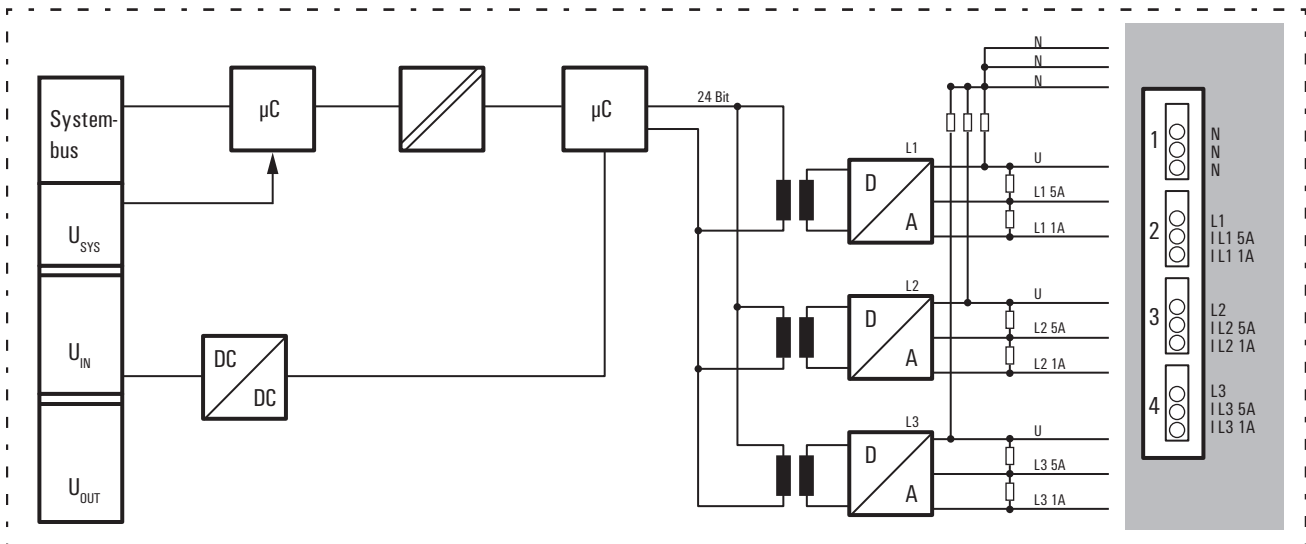
IP20  
A

The power measurement module is used for recording and processing of currents and voltages on one or three-phase loads up to a rated voltage of 300 V<sub>eff</sub> AC (phase to neutral conductor). Reactive, apparent harmonic and active power, energy consumption, phase angle, and many other electrical parameters are measured or calculated by the module.

The transmitted data via the process data of the different fieldbuses can be selected via parameters.

The Power measurement module can be easily integrated into existing automation solutions with u-remote. Using split-core current transformers it is not even necessary to intervene in the existing installation. Currents from 1 A or up to 5 A can be measured directly, higher currents can be measured with split-core or plug-in current transformers from Weidmüller.

### UR20-3EM-230V-AC block diagram example



**3EM-230V-AC**

- 1- or 3-phase power measurement for 1 A or 5 A (with or without transformer)
- Measurement in the phase conductor
- 16 bit resolution
- Power-/ reactive power measurement
- Energy meter Active / reactive
- Power factor
- Frequency measurement 45 ... 65 Hz
- Analysis of 31 harmonics

**Technical data**

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	500 V DC between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption ( $I_{N1}$ in power segment of field bus coupler), typ.	8 mA
Current consumption ( $I_{N2}$ in the respective power segment)	40 mA
Analogue inputs	
Number	3 neutral conductor connections, 3 phase conductor connections, 3 current measurement connections for 5 A, 3 current measurement connections for 1 A
Rated voltage	300 V <sub>eff</sub> (L-N)
Resolution per channel	16 Bit (intern 24 Bit)
Sample rate current measurement	3300 Samples/s
Frequency of supply network	45 ... 65 Hz
Analysis of harmonics	31 (Blackmann-Harris Window)
Nominal input current	0 ... 1 A / 0 ... 5 A AC
Insulation	1,5 kV <sub>eff</sub> (input/system)
Nominal voltage spike	4 kV
Category for voltage measurements	CAT III (EN 50178) / CAT II (IEC 61010 part 1)
Measuring procedure	High Resolution Delta Sigma (Current measurement in the phase conductor)
Measuring accuracy	0,5 % related to full scale (U/I) 1 % of the calculated values
Transformer ratio value	1 ... 1000
Input impedance voltage	2,4 MΩ per channel
Measuring resistor (shunt)	4 mΩ (at 5 A), 20 mΩ (at 1 A)
General data	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

**Ordering data**

Module variants
Power measurement module, 3 channels

**Accessories**

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

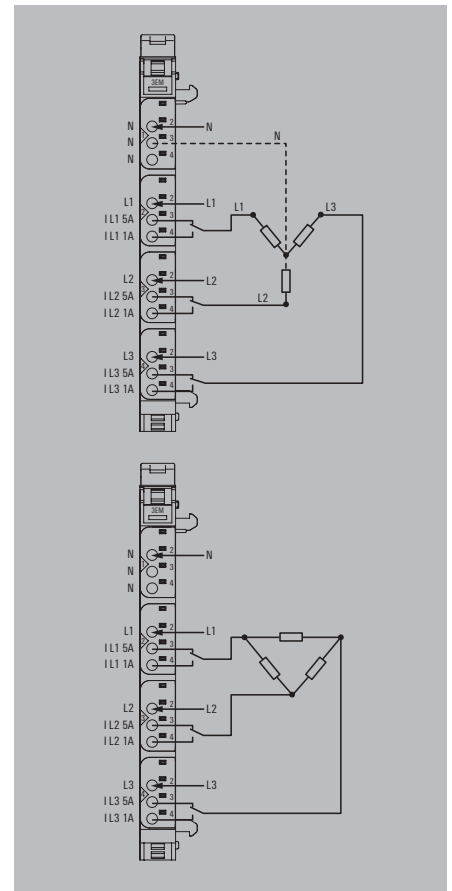
**UR20-3EM-230V-AC**

u-remote system bus	
48 Mbps	
500 V DC between current paths	
24 V DC +20 % / - 15 % via the system bus	
8 mA	
40 mA	
3 neutral conductor connections, 3 phase conductor connections, 3 current measurement connections for 5 A, 3 current measurement connections for 1 A	
300 V <sub>eff</sub> (L-N)	
16 Bit (intern 24 Bit)	
3300 Samples/s	
45 ... 65 Hz	
31 (Blackmann-Harris Window)	
0 ... 1 A / 0 ... 5 A AC	
1,5 kV <sub>eff</sub> (input/system)	
4 kV	
CAT III (EN 50178) / CAT II (IEC 61010 part 1)	
High Resolution Delta Sigma (Current measurement in the phase conductor)	
0,5 % related to full scale (U/I) 1 % of the calculated values	
1 ... 1000	
2,4 MΩ per channel	
4 mΩ (at 5 A), 20 mΩ (at 1 A)	

Type	Qty.	Order No.
UR20-3EM-230V-AC	1	2007420000

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE <sup>*1)</sup>	1	1429910000
THM UR20 WS <sup>*1)</sup>	1	1429420000
ESD UR20 DIN A4 WS <sup>*2)</sup>	10	1429430000
UR20-EM-2007420000-SP	1	1562270000
UR20-BM-SP	5	1350930000
UR20-PK-2007420000-SP	5	2068630000

<sup>\*1)</sup> 1 roll = 1000 label = 1 Qty.  
<sup>\*2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX (in preparation)	EN 60079
UL (in preparation)	UL 61010-2-201
MSIP (in preparation)	MSIP-REM-WMG-2007420000



Let's connect.

# Analogue output module

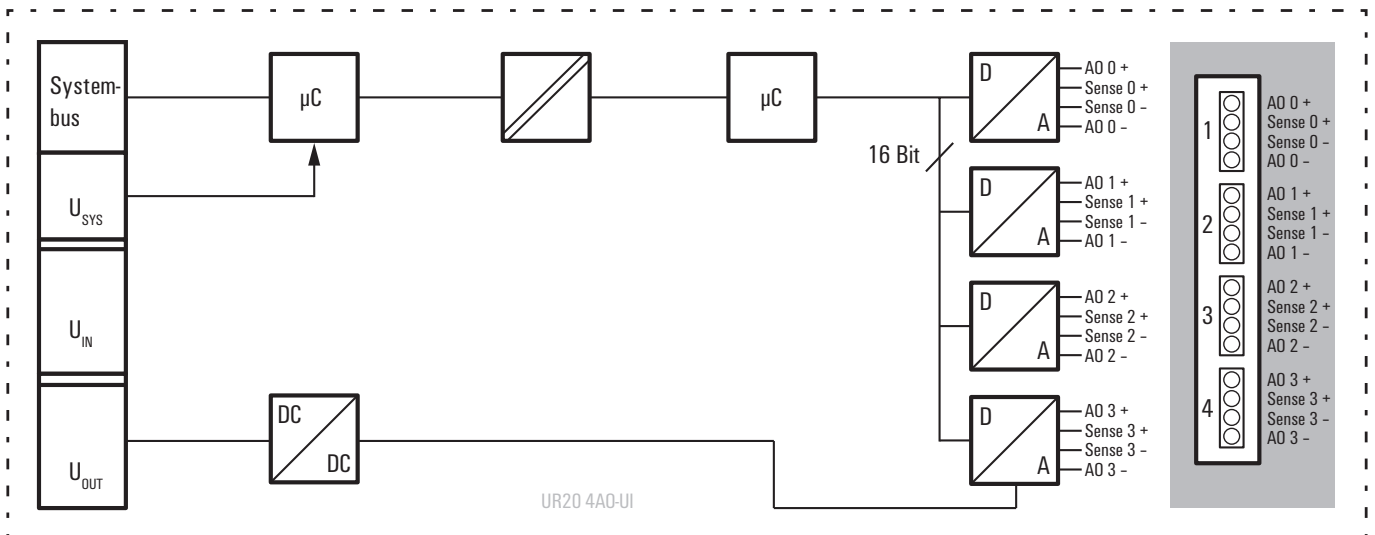
2- or 4-wire connection; 16-bit resolution; 4 outputs

IP20  
A

The analogue output module controls up to 4 analogue actuators with +/-10 V, +/-5 V, 0...10 V, 0...5 V, 2...10 V, 1...5 V, 0...20 mA or 4...20 mA with an accuracy of 0.05 % of the measurement range end value. An actuator with 2- or 4-wire technology can be connected to each plug-in connector. The outputs are defined channel by channel using parameterisation. A separate status LED is assigned to each channel.

The outputs are supplied from the output current path ( $U_{OUT}$ ).

Block diagram UR20-4AO-UI-16



4AO-UI-16

- 4 analogue outputs
- Outputs can be parameterised by channel (voltage, current)
- 16-bit resolution
- 2- and 4-wire connection
- Accuracy typ. 0.05 % FSR
- Replacement values can be set per channel
- Non reactiv
- Short-circuit-proof

UR20-4AO-UI-16



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>IN</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>OUT</sub> in the respective power segment)	85 mA
Analogue outputs	
Number	4
Output	1. Voltage (0...5 V, 0...10 V, 1...5 V, 2...10 V, ±5 V) 2. Current (0...20 mA or 4...20 mA)
Response time	1 ms for 4 channels
Resolution	16 Bit
Accuracy	±0.1 % FSR max., 0.05 % FSR typ.
Load resistance, voltage output	> 1 kΩ (at > 50 °C ambient temperature max. sum of sensor current = 25 mA)
Load resistance, current output	< 600 Ω
Actuator connection	2-wire (current and voltage; automatic detection), 4-wire (voltage)
Temperature coefficient	20 ppm Voltage / 31 ppm current measurement / °K
Max. error between T min. and T max.	220 ppm FSR
Monotonicity	yes
Crosstalk between the channels	±0.001 % FSR
Repeat accuracy	< 1 mV effectively
Output waviness	max. 0.001 %
Module diagnosis	yes
Replacement values	yes
General data	
Weight	83 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

Ordering data

Module variants	
Analogue output module, 4 channels, 16 Bit	

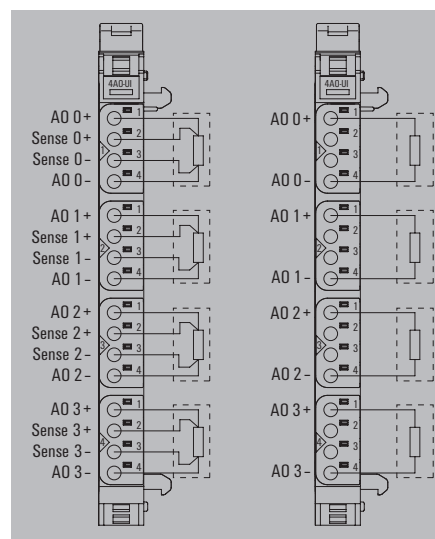
Type	Qty.	Order No.
UR20-4AO-UI-16	1	1315680000

Accessories

Accessories	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1315680000-SP	1	1347270000
UR20-BM-SP	5	1350930000
UR20-PK-1315680000-SP	5	1484070000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315680000



Let's connect.

4AO-UI-16-DIAG

- Advanced diagnosis functions
- 4 analogue outputs
- Outputs can be parameterised by channel (voltage, current)
- 16-bit resolution
- 2- and 4-wire connection
- Accuracy typ. 0.05 % FSR
- Replacement values can be set per channel
- Non reactive
- Short-circuit-proof

UR20-4AO-UI-16-DIAG



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>IN</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>OUT</sub> in the respective power segment)	85 mA
Analogue outputs	
Number	4
Output	1. Voltage (0...5 V, 0...10 V, 1...5 V, 2...10 V, ±5 V) 2. Current (0...20 mA or 4...20 mA)
Response time	1 ms for 4 channels
Resolution	16 Bit
Accuracy	±0.1 % FSR max., 0.05 % FSR typ.
Load resistance, voltage output	> 1 kΩ (at > 50 °C ambient temperature max. sum of sensor current = 25 mA)
Load resistance, current output	< 600 Ω
Actuator connection	2-wire (current and voltage; automatic detection), 4-wire (voltage)
Temperature coefficient	20 ppm Voltage / 31 ppm current measurement / °K
Max. error between T min. and T max.	220 ppm FSR
Monotonicity	yes
Crosstalk between the channels	±0.001 % FSR
Repeat accuracy	< 1 mV effectively
Output waviness	max. 0.001 %
Module diagnosis	yes
Individual channel diagnosis	yes
Replacement values	yes
General data	
Weight	98 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

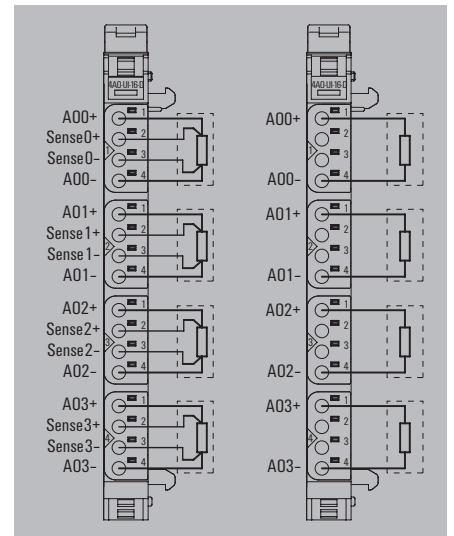
Ordering data

Module variants	Type	Qty.	Order No.
Analogue output module, 4 channels, 16 Bits, diagnosis functions	UR20-4AO-UI-16-DIAG	1	1315730000

Accessories

Type	Qty.	Order No.
KDSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1315730000-SP	1	1347330000
UR20-BM-SP	5	1350930000
UR20-PK-1315730000-SP	5	1518880000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315730000



Let's connect.

### 4AO-UI-16-HD

- 4 analogue outputs
- 4 plugs with 4 connections per module
- Outputs can be parameterised by channel (voltage, current)
- 16-bit resolution
- 2- and 4-wire connection
- Accuracy typ. 0.05 % FSR
- Replacement values can be set per channel
- Non reactive
- Short-circuit-proof

### Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>IN</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>OUT</sub> in the respective power segment)	85 mA
Analogue outputs	
Number	4
Output	1. Voltage (0...5 V, 0...10 V, 1...5 V, 2...10 V, ±5 V) 2. Current (0...20 mA or 4...20 mA)
Response time	1 ms for 4 channels
Resolution	16 Bit
Accuracy	±0,1 % FSR max., 0,05 % FSR typ.
Load resistance, voltage output	> 1 kΩ (at > 50 °C ambient temperature max. sum of sensor current = 25 mA)
Load resistance, current output	< 600 Ω
Actuator connection	2-wire (current and voltage; automatic detection), 4-wire (voltage)
Temperature coefficient	20 ppm Voltage / 31 ppm current measurement / °K
Max. error between T min. and T max.	220 ppm FSR
Monotonicity	yes
Crosstalk between the channels	±0.001 % FSR
Repeat accuracy	< 1 mV effectively
Output waviness	max. 0.001 %
Module diagnosis	yes
Individual channel diagnosis	no
Replacement values	yes
General data	
Weight	98 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

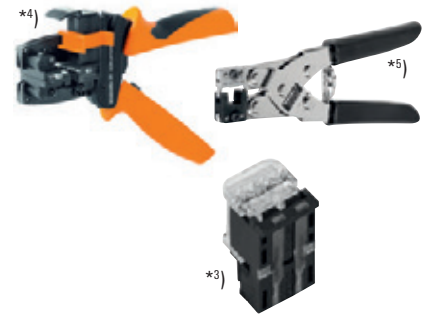
### Ordering data

Module variants	
Analogue output module, 4 channels, 16 Bits, HD-plug	

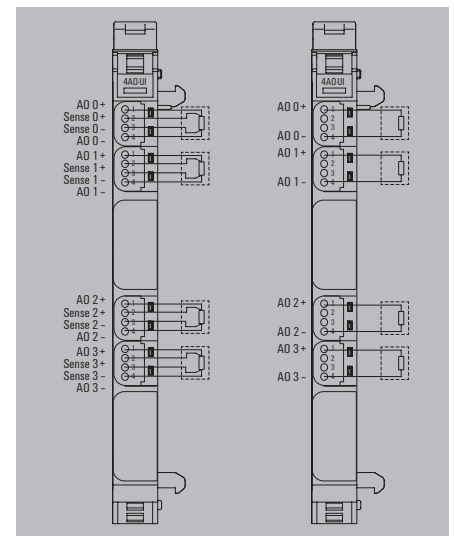
### Accessories

Coding elements	
Termination kit	
Swivel marker	
<sup>*3)</sup> HD-Plug	
<sup>*4)</sup> Stripping tool	
<sup>*5)</sup> Pressing tool	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

### UR20-4AO-UI-16-HD



Note: Please order connector separately



Type	Qty.	Order No.
UR20-4AO-UI-16-HD	1	1510690000

Type	Qty.	Order No.
KOSM BHZ5-00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
UR20-PGO.35	8	1469340000
multi-stripax 6-16	1	9202210000
PWZ-UR20-HD	1	1525820000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE <sup>*1)</sup>	1	1429910000
THM UR20 WS <sup>*1)</sup>	1	1429420000
ESO UR20 DIN A4 WS <sup>*2)</sup>	10	1429430000
UR20-EM-1510690000-SP	1	1515470000
UR20-BM-SP	5	1350930000
UR20-PK-1510690000-SP	5	1531830000

<sup>\*1)</sup> 1 roll = 1000 label = 1 Qty.  
<sup>\*2)</sup> 1 sheet = 60 label = 1 Qty.

Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1510690000



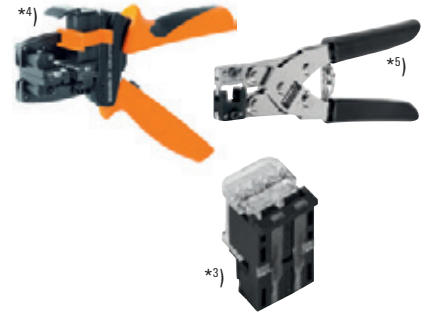
Let's connect.



**4AO-UI-16-DIAG-HD**

- 4 analogue outputs
- Advanced diagnosis functions
- Outputs can be parameterised by channel (voltage, current)
- 16-bit resolution
- 2- and 4-wire connection
- Accuracy typ. 0.05 % FSR
- Replacement values can be set per channel
- Non reactive
- Short-circuit-proof

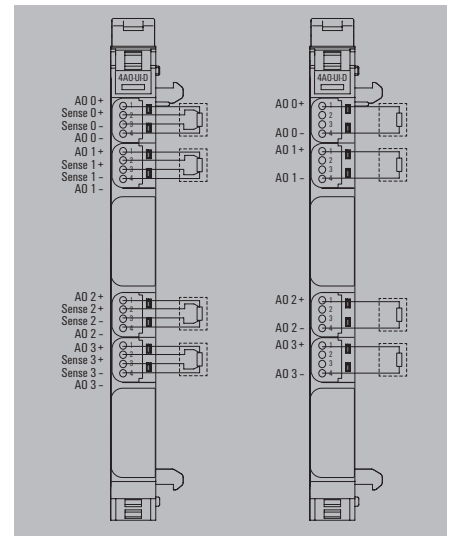
**UR20-4AO-UI-16-DIAG-HD**



Note: Please order connector separately

**Technical data**

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>IN</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>OUT</sub> in the respective power segment)	85 mA
Analogue outputs	
Number	4
Output	1. Voltage (0...5 V, 0...10 V, 1...5 V, 2...10 V, ±5 V) 2. Current (0...20 mA or 4...20 mA)
Response time	1 ms for 4 channels
Resolution	16 Bit
Accuracy	±0.1 % FSR max., 0.05 % FSR typ.
Load resistance, voltage output	> 1 kΩ (at > 50 °C ambient temperature max. sum of sensor current = 25 mA)
Load resistance, current output	< 600 Ω
Actuator connection	2-wire (current and voltage; automatic detection), 4-wire (voltage)
Temperature coefficient	20 ppm Voltage / 31 ppm current measurement / °K
Max. error between T min. and T max.	220 ppm FSR
Monotonicity	yes
Crosstalk between the channels	±0.001 % FSR max.
Repeat accuracy	< 1 mV effectively
Output waviness	max. 0.001 %
Module diagnosis	yes
Individual channel diagnosis	yes
Replacement values	yes
General data	
Weight	98 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm



**Ordering data**

Module variants	
Analogue output module, 4 channels, 16 Bits, diagnosis functions, HD-plug	

Type	Qty.	Order No.
UR20-4AO-UI-16-DIAG-HD	1	1506930000

**Accessories**

Coding elements	
Termination kit	
Swivel marker	
<sup>*3)</sup> HD-Plug	
<sup>*4)</sup> Stripping tool	
<sup>*5)</sup> Pressing tool	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
UR20-PGO.35	8	1469340000
multi-stripax 6-16		
PWZ-UR20-HD	1	1525820000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE <sup>*1)</sup>	1	1429910000
THM UR20 WS <sup>*1)</sup>	1	1429420000
ESO UR20 DIN A4 WS <sup>*2)</sup>	10	1429430000
UR20-EM-1506930000-S	1	1515480000
UR20-BM-SP	5	1350930000
UR20-PK-1506930000-SP	5	1531810000

<sup>\*1)</sup> 1 roll = 1000 label = 1 Qty.  
<sup>\*2)</sup> 1 sheet = 60 label = 1 Qty.

Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1506930000



Let's connect.



# Digital counter- and communication modules

## 100/ 500 kHz; 32-Bit Counter data width; Single channel diagnosis

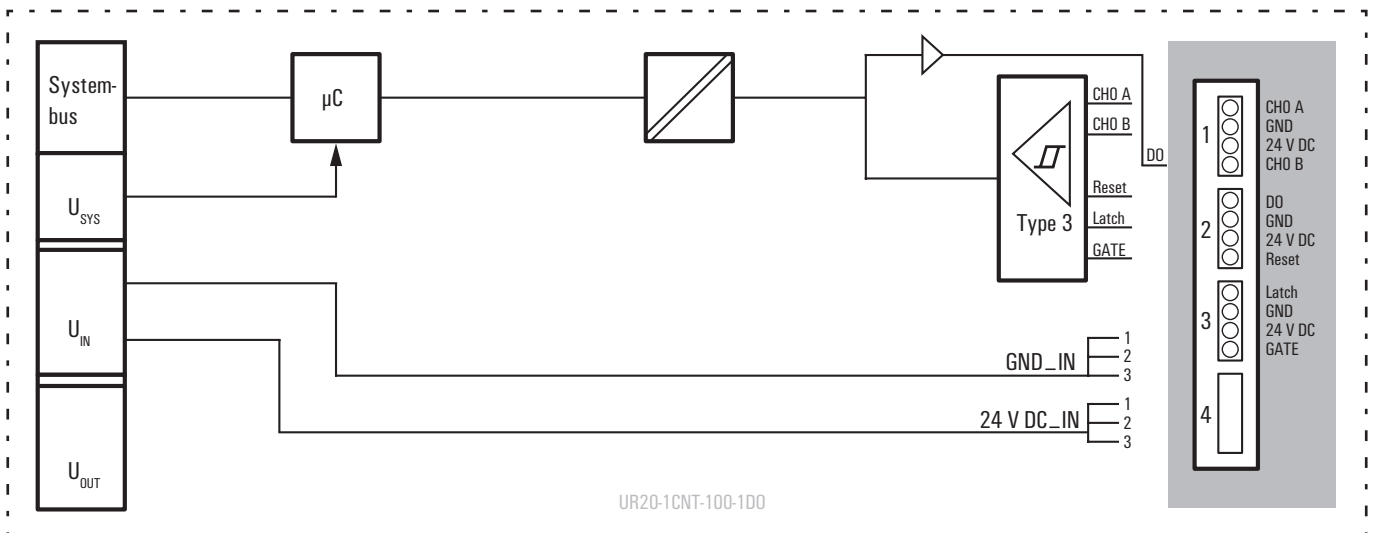
IP20  
A

In automated systems, it is impossible to imagine industry without the collection of incremental- and absolut encoder values. Developed specifically for these applications Weidmüller now offers several counter modules that can take values with an input frequency of up to 500 kHz. By the synchronous-serial Interface module (SSI) high-precision positioning can be realized with absolute encoders. By parameterization the module can work in master- or listening mode to meet all operational situations. For the frequency measurement up to 100 kHz a module with pulse input is available, the UR20-1CNT-500 module has an input that can detect frequencies up to 500 kHz. The UR20-2CNT-100 module has two independent counter inputs and is supplemented by the module UR20-1CNT-100-1DO with only one counter, but additional options. A Latch-, Gate- and Reset input allows external control of the counter. In addition, a digital output can trigger an immediate event, when there are compared values set.

The module UR20-1COM-232-485-422 offers expanded communication possibilities, devices with RS232, RS485 or RS422 interface can be operated efficiently on u-remote. A solution for the connection from the cabinet to the field represents the module UR20-1COM-SAI-PRO. At this gateway up to 15 decentralized IP67 SAI-PRO sub-bus modules can be integrated per u-remote module.

The module electronics supply the connected sensors from the input current path ( $U_{IN}$ ).

### UR20-1CNT-100-1DO block diagram example



### 1CNT-100-1D0

- Latch-, Gate- and Reset input
- Counter data width 32-Bit
- Maximum input frequency 100 kHz
- Operation mode impulse, direction, 1-, 2- or 4-times
- Sensor feed
- Input filter adjustable up to 1 ms
- One digital output

### UR20-1CNT-100-1D0



#### Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	35 mA
Digital Inputs	
Number of counter inputs	1
Type	incremental encoder
Input filter	adjustable up to 1 ms
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor feed	yes
Sensor connection	2- and 3-wire
Reverse polarity protection	yes
Module diagnosis	yes
Single channel diagnosis	yes
Input current per channel, max.	3.5 mA
Counter data width	32 Bit
Input frequency, max.	100 kHz
Counter frequency, max.	400 kHz
Latch-, Gate-, Reset-input	yes
Operation mode	Impulse / direction / 1-, 2-, 4-times
General data	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Type	Qty.	Order No.
UR20-1CNT-100-1D0	1	1315570000

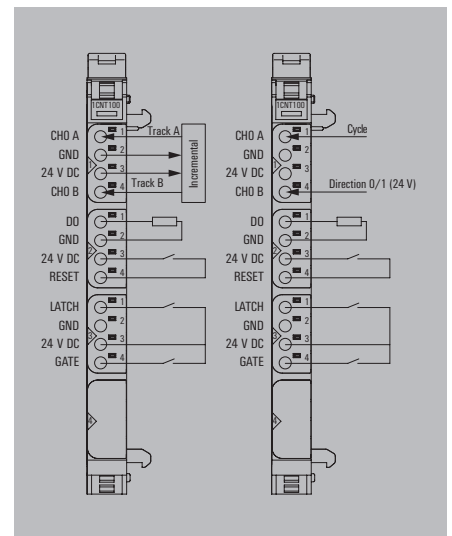
#### Ordering data

Module variants	
Digital counter module, 1 channel, 100 kHz	

#### Accessories

Type	Qty.	Order No.
KDSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1315570000-SP	1	1347140000
UR20-BM-SP	5	1350930000
UR20-PK-1315570000-SP	5	1346520000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315570000



Let's connect.

**2CNT-100**

- Counter data width 32 Bit
- Maximum input frequency 100 kHz
- Operation mode impulse, direction, 1-, 2- or 4-times
- Sensor feed
- Input filter adjustable up to 1 ms

**UR20-2CNT-100**



**Technical data**

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	35 mA
Digital Inputs	
Number of counter inputs	2
Type	incremental encoder
Input filter	adjustable up to 1 ms
Input voltage, low	< 5 V
Input voltage, high	> 11 V
Sensor feed	yes
Sensor connection	2- and 3-wire
Reverse polarity protection	yes
Module diagnosis	yes
Single channel diagnosis	yes
Input current per channel, max.	3.5 mA
Counter data width	32 Bit
Input frequency, max.	100 kHz
Counter frequency, max.	400 kHz
Operation mode	Impulse / direction / 1-, 2-, 4-times
General data	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

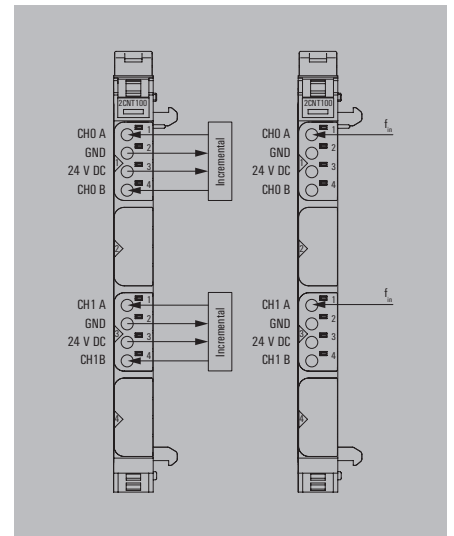
Type	Qty.	Order No.
UR20-2CNT-100	1	1315590000

**Ordering data**

Module variants	
Digital counter module, 2 channel, 100 kHz	

**Accessories**

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
Replacement parts		
UR20-EM-1315590000-SP	1	1347150000
UR20-BM-SP	5	1350930000
UR20-PK-1315590000-SP	5	1346540000
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty. * <sup>2)</sup> 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315590000



Let's connect.

**1CNT-500**

- Counter data width 32-Bit
- Maximum input frequency 500 kHz
- Operation mode impulse, direction, 1-, 2- or 4-times
- Sensor feed
- Input filter adjustable up to 1 ms
- One digital output

**UR20-1CNT-500**



**Technical data**

**System data**

Interface  
Transmission rate of system bus  
Galvanic isolation

**Supply**

Voltage supply  
Current consumption from system current path  $I_{SYS}$   
Current consumption from input current path  $I_{IN}$

**Digitale Eingänge**

Number of counter inputs  
Type  
Input filter  
Sensor supply

Short-circuit-proof  
Module diagnosis  
Individual channel diagnosis  
Counter data width  
Input frequency, max.  
Operation mode

**General data**

Weight  
Dimensions (H/W/D)

u-remote system bus
48 Mbps
DC 500 V between current paths
24 V DC +20 % / - 15 % via the system bus
8 mA
20 mA
1
Incremental encoder
adjustable up to 1 ms
max. 0.5 A at 24 V
max. 0.4 A at 5 V
yes
yes
no
32 Bit
500 kHz
Impuls / direction / 1-, 2-, 4-times
72 g
120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

**Ordering data**

**Module variants**

Digital counter module, 1 channel, 500 kHz

Type	Qty.	Order No.
UR20-1CNT-500	1	1315580000

**Accessories**

- Coding elements
- Termination kit
- Swivel marker
- Connection marker for pusher custom printing
- Connection marker for pusher neutral
- Module marker for custom printing
- Module marker for neutral
- Thermotransfer version (Material: Polyester)
- Thermotransfer version (Material: Polyester)
- Paper version for Laserprinter

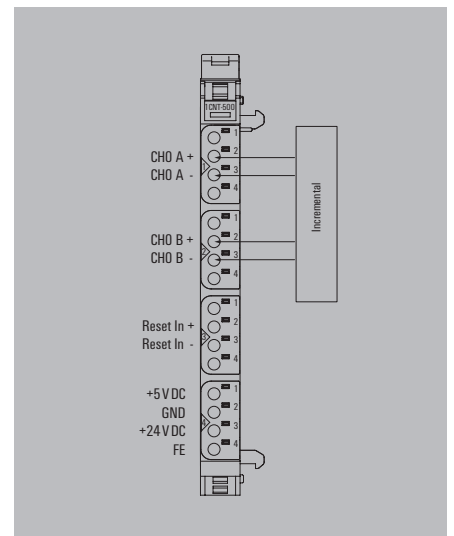
**Replacement parts**

- Electronics module
- Basic module
- Plug-in connector unit

**Note**

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1315580000-SP	1	1347170000
UR20-BM-SP	5	1350930000
UR20-PK-1315580000-SP	5	1346530000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315580000



Let's connect.

**2FCNT-100**

- Counter data width 32 Bit
- Maximum input frequency 100 kHz
- Operation mode impulse
- Sensor feed
- Input filter adjustable up to 1 ms

**UR20-2FCNT-100**



**Technical data**

**System data**

Interface  
Transmission rate of system bus  
Galvanic isolation

**Supply**  
Voltage supply  
Current consumption ( $I_N$  in power segment of field bus coupler), typ.  
Current consumption ( $I_N$  in the respective power segment)

**Digital Inputs**

Number of counter inputs  
Type  
Input filter  
Input voltage, low  
Input voltage, high  
Sensor feed  
Sensor connection  
Reverse polarity protection  
Module diagnosis  
Single channel diagnosis  
Input current per channel, max.  
Counter data width  
Input frequency, max.  
Operation mode

**General data**

Weight  
Dimensions (H/W/D)

u-remote system bus  
48 Mbps  
DC 500 V between current paths

24 V DC +20 % / - 15 % via the system bus  
8 mA  
35 mA

2  
digital input  
adjustable up to 1 ms  
< 5 V  
> 11 V  
yes  
2- and 3-wire  
yes  
yes  
no  
3.5 mA  
32 Bit  
100 kHz  
Impulse

87 g  
120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

**Ordering data**

**Module variants**

Digital frequency counter module, 2 channel, 100 kHz

Type	Qty.	Order No.
UR20-2FCNT-100	1	1508080000

**Accessories**

Coding elements  
Termination kit  
Swivel marker  
Connection marker for pusher custom printing  
Connection marker for pusher neutral  
Module marker for custom printing  
Module marker for neutral  
Thermotransfer version (Material: Polyester)  
Thermotransfer version (Material: Polyester)  
Paper version for Laserprinter

**Replacement parts**

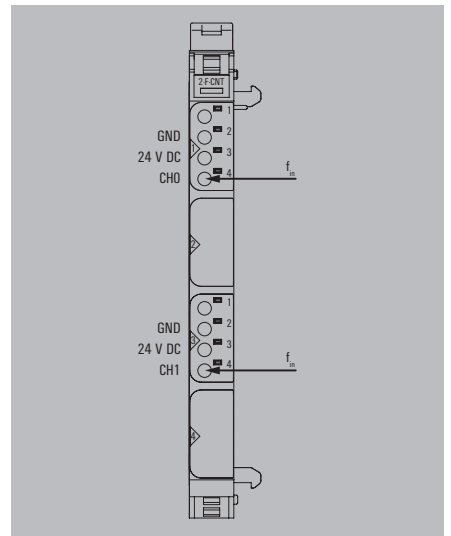
Electronics module  
Basic module  
Plug-in connector unit

**Note**

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

UR20-EM-1508080000-SP	1	1515440000
UR20-BM-SP	5	1350930000
UR20-PK-1508080000-SP	5	1518840000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1508080000



Let's connect.

1SSI

- Parameterised transfer rate
- Listening- or Master-Mode
- Data width 8 ... 32 Bit
- Adjustable delay time

UR20-1SSI



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption from system current path I <sub>sys</sub>	8 mA
Current consumption from input current path I <sub>OUT</sub>	25 mA + sensor current
Serial inputs	
Number	1
Type	SSI (differential input RS-422)
Transfer rate SSI	125 kHz, 250 kHz, 500 kHz, 1 MHz, 1.5 MHz, 2 MHz
Delay time	1 µs, 2 µs, 4 µs, 8 µs, 16 µs, 32 µs, 48 µs, 64 µs
Data width	8 ... 32 Bit
Data type	Binary / Gray-Code
SSI-mode	Listening / Master
Sensor supply	0.5 A (24 V DC); 0.4 A (5V DC)
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	no
Wire length	max. 320 m at 125 kHz, screened
General data	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

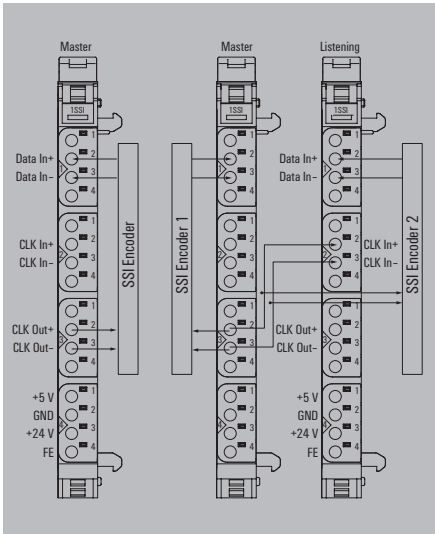
Type	Qty.	Order No.
UR20-1SSI	1	1508090000

Ordering data

Module variants	
SSI-module, 1 channel, 8 - 32 Bit	

Accessories

Type	Qty.	Order No.
KDSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
Replacement parts		
Electronics module	UR20-EM-1508090000-SP	1 1515490000
Basic module	UR20-BM-SP	5 1350930000
Plug-in connector unit	UR20-PK-1508090000-SP	5 1559870000
<b>Note</b>		
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty.		
* <sup>2)</sup> 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1508090000



Let's connect.



1COM-232-485-422

- Interface for RS232, RS485 and RS422 peripherals
- Adjustable transfer rate
- Galvanic isolation of the signals in the module
- Separate power supply for external peripheral to the module

UR20-1COM-232-485-422



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / -15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	50 mA + load
RS Interface	
Number	1
Connection	1x RS232 / 1x RS485/422
Transmission rate	configurable, 300... 115200 Bit/s
Supply voltage	5 V / 24 V
Output current Supply voltage, max.	0.5 A
RS232 standards	DIN 66020, DIN 66259, EIA-RS 232C, CCITT V.24/V.28
RS485/422 standards	DIN 66259 Part 1 and 3, EIA-RS422/485, CCITT V.11
Short-circuit-proof	yes
Module diagnosis	yes
Individual channel diagnosis	yes
General data	
Weight	92 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Ordering data

Module variants	
RS232/RS485/RS422 communication module	

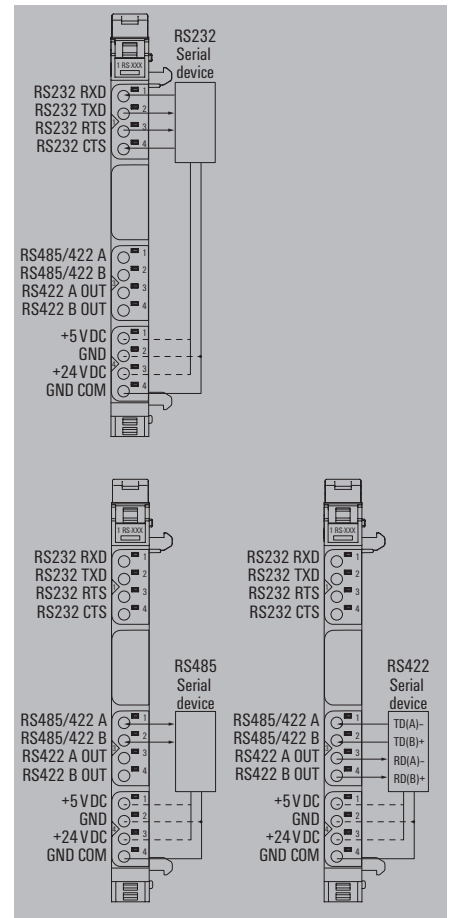
Type	Qty.	Order No.
UR20-1COM-232-485-422	1	1315750000

Accessories

Replacement parts	
Electronics module	UR20-EM-1315750000-SP 1 1347350000
Basic module	UR20-BM-SP 5 1350930000
Plug-in connector unit	UR20-PK-1315750000-SP 5 2425150000
Note	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX (in preparation)	EN 60079
UL (in preparation)	UL 61010-2-201
MSIP (in preparation)	MSIP-REM-WMG-1315750000



Let's connect.

**1COM-SAI-PRO**

- 15 SAI-PRO modules connectable
- Max. 50 m Subbus wire length
- Continuous diagnostics IP20-IP67
- Representation of SAI-PRO modules in web server

**UR20-1COM-SAI-PRO**



**Technical data**

<b>System data</b>	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
<b>Supply</b>	
Voltage supply	24 V DC +20 % / -15 % via the system bus
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA
Current consumption (I <sub>N</sub> in the respective power segment)	20 mA + SAI supply current
<b>IP67 Interface</b>	
Number	1
Connection	SAI-PRO Subbus
Transmission rate	250 kbit/s, 500 kbit/s configurable
Supply voltage	+24 V DC
Output current Supply voltage	max. 3 A
Short-circuit-proof	yes
Module diagnosis	yes
Individual channel diagnosis	yes, diagnosis of the Subbus modules
<b>General data</b>	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

<b>System data</b>		
Interface	u-remote system bus	
Transmission rate of system bus	48 Mbps	
Galvanic isolation	DC 500 V between current paths	
<b>Supply</b>		
Voltage supply	24 V DC +20 % / -15 % via the system bus	
Current consumption (I <sub>N</sub> in power segment of field bus coupler), typ.	8 mA	
Current consumption (I <sub>N</sub> in the respective power segment)	20 mA + SAI supply current	
<b>IP67 Interface</b>		
Number	1	
Connection	SAI-PRO Subbus	
Transmission rate	250 kbit/s, 500 kbit/s configurable	
Supply voltage	+24 V DC	
Output current Supply voltage	max. 3 A	
Short-circuit-proof	yes	
Module diagnosis	yes	
Individual channel diagnosis	yes, diagnosis of the Subbus modules	
<b>General data</b>		
Weight	87 g	
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm	

**Ordering data**

<b>Module variants</b>	
IP20-IP67 communication module	

Type	Qty.	Order No.
UR20-1COM-SAI-PRO	1	2007430000

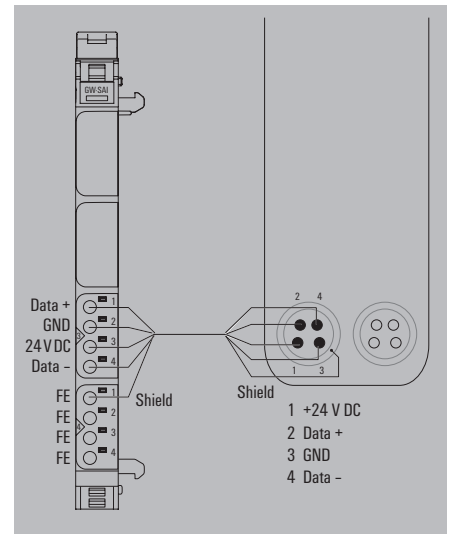
**Accessories**

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

<b>Replacement parts</b>	
Electronics module	
Basic module	
Plug-in connector unit	
<b>Note</b>	

UR20-EM-2007430000-SP	1	2425350000
UR20-BM-SP	5	1350930000
UR20-PK-2007430000-SP	5	2425160000
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty.		
* <sup>2)</sup> 1 sheet = 60 label = 1 Qty.		



Product standard	IEC 61131-2
EMC	EN 61000
ATEX (in preparation)	EN 60079
UL (in preparation)	UL 61010-2:201
MSIP (in preparation)	MSIP-REM-WMG-2007430000



Let's connect.

# Safe I/O modules and safe power-feed modules

## PROFIsafe/FSoE; PLe, Kat. 4/SIL 3; OSSD-output; wire breakage and short-circuit detection

Safety technology is of central importance in the automation industry and machine construction. When attempting to reduce risks and avoid putting people and the environment in danger, you need solutions which satisfy stringent requirements and statutory specifications.

Weidmüller PROFIsafe and Fail-Safe-over-EtherCAT modules (IEC 61784-3 respectively IEC 61784-3-3) are providing variable parameterization possibilities and because of this a very high flexibility and adaptability to your application. Due to the standards a use in existing systems is straightforward. The safe I/O-modules with PROFIsafe or FSoE are available with digital in- and outputs.

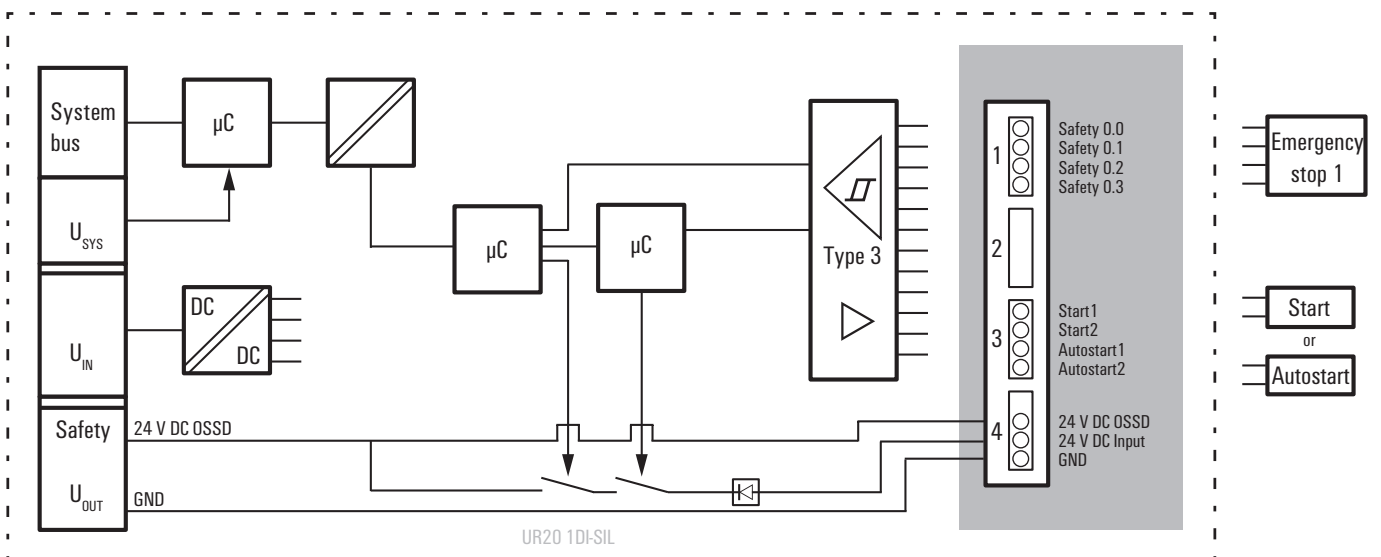
The safe power-feed modules of the u-remote system have key features such as emergency stop circuits and wire breakage/ short-circuit detection. They satisfy all SIL 3 requirements according to IEC 62061 and EN ISO 13849-1, Category 4, PL e and support the safe operation of your system.

By safely shutting down the downstream output modules, the safety modules attain maximum safety with optimum control. All input sensors are independently supplied via separate voltage paths and report the current machine status to the control unit. The restart is either performed in manual mode or using the autostart function.

Safe I/O- and safe power-feed modules from Weidmüller also cut maintenance and service times and improve your response times in an emergency – thanks to a concept of maximum transparency, e.g. using OSSD output.

The module electronics supply the connected actuators from the output current path ( $U_{OUT}$ ).

### UR20-PF-O-1DI-SIL block diagram example



**4DI-4DO-PN-FSOE**

- FailSafe over EtherCAT
- 4 digital inputs, two of them are parametrisable P- or N-switching
- 4 digital outputs, two of them are parametrisable P- or N-switching
- Constant current with thermal switch-off

**Technical data**

System data	
Interface	
Transmission rate of system bus	
Galvanic isolation	
Safety-related data	
Achievable safety level	Inputs Outputs
Diagnostic Coverage DC <sub>AVE</sub> (IEC 62061)	
Diagnostic Coverage (DIN EN ISO 13849)	
MTTF <sub>d</sub> (Mean Time To Failure dangerous)	
PFH (Probability of Failure per Hour in 1/h)	
SSF (Safe Failure Fraction)	
HFT (Hardware Fault Tolerance)	
Supply	
Voltage supply	
Current consumption from system current path I <sub>sys</sub>	
Current consumption from input current path I <sub>OUT</sub>	
Inputs	
Number	
Input Type	
Input filter	
Input voltage low	
Input voltage high	
Sensor supply	
Reverse polarity protection	
Module diagnosis	
Individual channel diagnosis	
Outputs	
Number	
Type of load	
Response time	
Max. output current	per channel/per module
Actuator connection	
Short-circuit-proof	
Protective circuit	
Response time of the current limiting circuit	
Module diagnosis	
Individual channel diagnosis	
Reactionless	
General data	
Weight	
Dimensions (H/W/D)	

**Ordering data**

Module variants	
Safety module FSOE, 4 digital inputs, 4 digital outputs	

**Accessories**

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
Replacement parts	
Electronics module	
Basic module	
Plug-in connector unit	
Note	

**UR20-4DI-4DO-PN-FSOE**



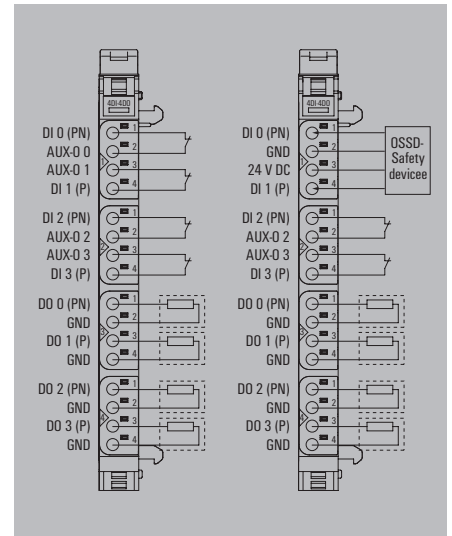
u-remote system bus
48 Mbps
DC 500 V between current paths
SIL 3 (IEC 61508), SILCL 3 (IEC 62061), PL <sub>e</sub> and Cat. 4 (DIN EN ISO 13849-1)*
SIL 3 (IEC 61508), SILCL 3 (IEC 62061), PL <sub>e</sub> and Cat. 4 (DIN EN ISO 13849-1)*
Input: 0.921; output: 0.969
Input, single channel: 90%; dual channel: 99%; Output: 99%
> 100 Years (Input: 4488a, output: 3067a)
Input, single channel: 2*10 <sup>-9</sup> ; dual channel: 4.07*10 <sup>-11</sup> ; Output: 2.02*10 <sup>-11</sup>
Input: 0.978; output: 0.989
Input, single channel: 0; dual channel: 1; Output: 1
24 V DC +20 % / - 15 % via the system bus
8 mA
< 30 mA + sensor feed
4, two of them are parametrisable P- or N-switching
Type 1 and Type 3 as per IEC 61131-2*
Input delay adjustable from 0 to 40 ms*
P-switching: < 5 V; N-switching: > 5 V against +24 V
P-switching: > 11 V; N-switching: < -11 V against +24 V
max. 0.8 A per plug, total max. 1.6 A
yes
yes
yes
4, two of them are parametrisable P- or N-switching
ohmic, inductive, lamp load
10 ms
0.5 A / 2 A
2-wire
yes
Constant current with thermal switch-off
< 100 µs
yes
yes
no
87 g
120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Type	Qty.	Order No.
UR20-4DI-4DO-PN-FSOE	1	1529780000

\*) For this and additional technical data, please refer to the manual available at [www.weidmuller.de](http://www.weidmuller.de) or scan the QR code below.

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1529780000-SP	1	1992960000
UR20-BM-SP	5	1350930000
UR20-PK-1529780000-SP	5	1993030000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1529780000



Let's connect.

8DI-PN-FSOE

- FailSafe over EtherCAT
- 8 digital inputs, four of them are parametrisable P- or N-switching
- 2-wire, 3-wire, 4-wire connection

UR20-8DI-PN-FSOE



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Safety-related data	
Achievable safety level	SIL 3 (IEC 61508), SILCL 3 (IEC 62061), PL <sub>e</sub> and Cat. 4 (DIN EN ISO 13849-1)*
Diagnostic Coverage DC <sub>AVG</sub> (IEC 62061)	0.921
Diagnostic Coverage (DIN EN ISO 13849)	Single channel: 90%; dual channel: 99%
MTTF <sub>d</sub> (Mean Time To Failure dangerous)	> 100 Years (4488a)
PFH (Probability of Failure per Hour in 1/h)	Single channel: 2*10 <sup>9</sup> ; dual channel: 4.07*10 <sup>11</sup>
SSF (Safe Failure Fraction)	0.978
HFT (Hardware Fault Tolerance)	Single channel: 0; dual channel: 1
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption from system current path I <sub>sys</sub>	8 mA
Current consumption from input current path I <sub>IN</sub>	< 30 mA + sensor feed
Inputs	
Number	8, four of them are parametrisable P- or N-switching
Input Type	Type 1 and Type 3 as per IEC 61131-2*
Input filter	Input delay adjustable from 0 to 40 ms*
Input voltage low	P-switching: < 5 V; N-switching: > -5 V against +24 V
Input voltage high	P-switching: > 11 V; N-switching: < -11 V against +24 V
Sensor supply	max. 0.8 A per plug, total max. 3.2 A
Sensor connection	2-wire, 3-wire, 4-wire
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	yes
General Data	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Ordering data

Module variants	
Safety module FSOE, 8 digital inputs	

Type	Qty.	Order No.
UR20-8DI-PN-FSOE	1	1529800000

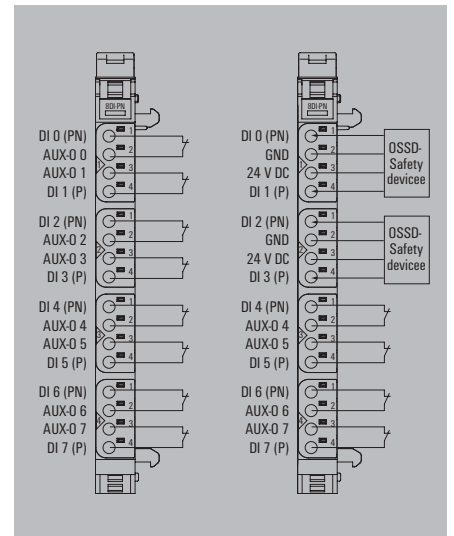
\*) For this and additional technical data, please refer to the manual available at [www.weidmueller.de](http://www.weidmueller.de) or scan the QR code below.

Accessories

Accessories	
Coding elements	KOSM BHZ5 00
Termination kit	UR20-EBK-ACC
Swivel marker	UR20-SM-ACC
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS
Module marker for custom printing	DEK 5/8-11.5 MC SDR
Module marker for neutral	DEK 5/8-11.5 MC NE WS
Thermotransfer version (Material: Polyester)	THM UR20 GE * <sup>1)</sup>
Thermotransfer version (Material: Polyester)	THM UR20 WS * <sup>1)</sup>
Paper version for Laserprinter	ESD UR20 DIN A4 WS * <sup>2)</sup>

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

Replacement parts	
Electronics module	UR20-EM-1529800000-SP
Basic module	UR20-BM-SP
Plug-in connector unit	UR20-PK-1529800000-SP
Note	
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty. * <sup>2)</sup> 1 sheet = 60 label = 1 Qty.	



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1529800000



Let's connect.

**4DI-4DO-PN-FSPS**

- PROFIsafe
- 4 digital inputs, two of them are parametrisable P- or N-switching
- 4 digital outputs, two of them are parametrisable P- or N-switching
- Constant current with thermal switch-off

**Technical data**

<b>System data</b>	
Interface	
Transmission rate of system bus	
Galvanic isolation	
<b>Safety-related data</b>	
Achievable safety level	Inputs Outputs
Diagnostic Coverage DC <sub>avg</sub> (IEC 62061)	
Diagnostic Coverage (DIN EN ISO 13849)	
MTTF <sub>e</sub> (Mean Time To Failure dangerous)	
PFH (Probability of Failure per Hour in 1/h)	
SSF (Safe Failure Fraction)	
HFT (Hardware Fault Tolerance)	
<b>Supply</b>	
Voltage supply	
Current consumption from system current path I <sub>sys</sub>	
Current consumption from input current path I <sub>out</sub>	
<b>Inputs</b>	
Number	
Input Type	
Input filter	
Input voltage low	
Input voltage high	
Sensor supply	
Reverse polarity protection	
Module diagnosis	
Individual channel diagnosis	
<b>Outputs</b>	
Number	
Type of load	
Response time	
Max. output current	per channel/per module
Actuator connection	
Short-circuit-proof	
Protective circuit	
Response time of the current limiting circuit	
Module diagnosis	
Individual channel diagnosis	
Reactionless	
<b>General data</b>	
Weight	
Dimensions (H/W/D)	

**Ordering data**

<b>Module variants</b>	
Safety module PROFIsafe, 4 digital inputs, 4 digital outputs	

**Accessories**

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
<b>Replacement parts</b>	
Electronics module	
Basic module	
Plug-in connector unit	
<b>Note</b>	

**UR20-4DI-4DO-PN-FSPS**



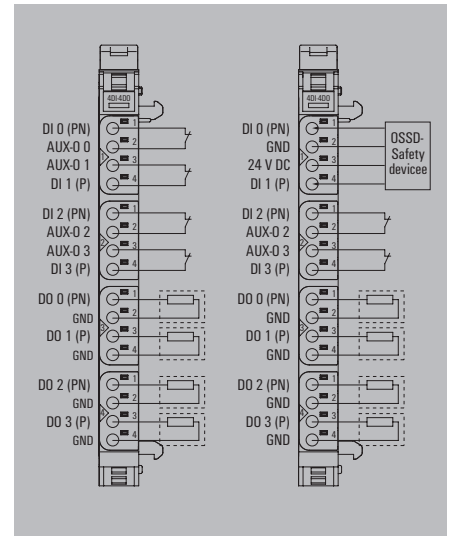
u-remote system bus	
48 Mbps	
DC 500 V between current paths	
SIL 3 (IEC 61508), SILCL 3 (IEC 62061), PL <sub>e</sub> and Cat. 4 (DIN EN ISO 13849-1)*	
SIL 3 (IEC 61508), SILCL 3 (IEC 62061), PL <sub>e</sub> and Cat. 4 (DIN EN ISO 13849-1)*	
Input: 0.921; output: 0.969	
Input, single channel: 90%; dual channel: 99%; Output: 99%	
> 100 Years (Input: 4488a, output: 3067a)	
Input, single channel: 2*10 <sup>-9</sup> ; dual channel: 4.07*10 <sup>-11</sup> ; Output: 2.02*10 <sup>-11</sup>	
Input: 0.978; output: 0.989	
Input, single channel: 0; dual channel: 1; Output: 1	
24 V DC +20 % / - 15 % via the system bus	
8 mA	
< 30 mA + sensor feed	
4, two of them are parametrisable P- or N-switching	
Type 1 and Type 3 as per IEC 61131-2*	
Input delay adjustable from 0 to 40 ms*	
P-switching: < 5 V; N-switching: > 5 V against +24 V	
P-switching: > 11 V; N-switching: < -11 V against +24 V	
max. 0.8 A per plug, total max. 1.6 A	
yes	
yes	
yes	
4, two of them are parametrisable P- or N-switching	
ohmic, inductive, lamp load	
10 ms	
0.5 A / 2 A	
2-wire	
yes	
Constant current with thermal switch-off	
< 100 µs	
yes	
yes	
no	
87 g	
120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm	

<b>Type</b>	<b>Qty.</b>	<b>Order No.</b>
UR20-4DI-4DO-PN-FSPS	1	1335060000

\*) For this and additional technical data, please refer to the manual available at [www.weidmuller.de](http://www.weidmuller.de) or scan the QR code below.

<b>Type</b>	<b>Qty.</b>	<b>Order No.</b>
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1335060000-SP	1	1347550000
UR20-BM-SP	5	1350930000
UR20-PK-1335060000-SP	5	1992940000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1335060000



Let's connect.

8DI-PN-FSPS

- PROFIsafe
- 8 digital inputs, four of them are parametrisable P- or N-switching
- 2-wire, 3-wire, 4-wire connection

UR20-8DI-PN-FSPS



Technical data

System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Safety-related data	
Achievable safety level	Inputs
Diagnostic Coverage $DC_{AVE}$ (IEC 62061)	SIL 3 (IEC 61508), SILCL 3 (IEC 62061), PL <sub>e</sub> and Cat. 4 (DIN EN ISO 13849-1)*
Diagnostic Coverage (DIN EN ISO 13849)	0.921
MTTF <sub>d</sub> (Mean Time To Failure dangerous)	Single channel: 90%; dual channel: 99%
PFH (Probability of Failure per Hour in 1/h)	> 100 Years (4488a)
SSF (Safe Failure Fraction)	Single channel: $2 \cdot 10^{-9}$ ; dual channel: $4.07 \cdot 10^{-11}$
HFT (Hardware Fault Tolerance)	0.978
	Single channel: 0; dual channel: 1
Supply	
Voltage supply	24 V DC +20 % / - 15 % via the system bus
Current consumption from system current path $I_{SYS}$	8 mA
Current consumption from input current path $I_{IN}$	< 30 mA + sensor feed
Inputs	
Number	8, four of them are parametrisable P- or N-switching
Input Type	Type 1 and Type 3 as per IEC 61131-2*
Input filter	Input delay adjustable from 0 to 40 ms*
Input voltage low	P-switching: < 5 V; N-switching: > -5 V against +24 V
Input voltage high	P-switching: > 11 V; N-switching: < -11 V against +24 V
Sensor supply	max. 0.8 A per plug, total max. 3.2 A
Sensor connection	2-wire, 3-wire, 4-wire
Reverse polarity protection	yes
Module diagnosis	yes
Individual channel diagnosis	yes
General Data	
Weight	87 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Ordering data

Module variants	
Safety module PROFIsafe, 8 digital inputs	

Type	Qty.	Order No.
UR20-8DI-PN-FSPS	1	1335070000

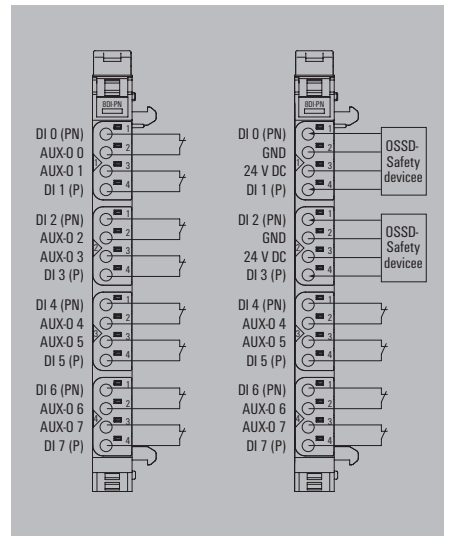
\*) For this and additional technical data, please refer to the manual available at [www.weidmueller.de](http://www.weidmueller.de) or scan the QR code below.

Accessories

Accessories	
Coding elements	KOSM BHZ5 00
Termination kit	UR20-EBK-ACC
Swivel marker	UR20-SM-ACC
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS
Module marker for custom printing	DEK 5/8-11.5 MC SDR
Module marker for neutral	DEK 5/8-11.5 MC NE WS
Thermotransfer version (Material: Polyester)	THM UR20 GE * <sup>1)</sup>
Thermotransfer version (Material: Polyester)	THM UR20 WS * <sup>1)</sup>
Paper version for Laserprinter	ESD UR20 DIN A4 WS * <sup>2)</sup>

Replacement parts	
Electronics module	UR20-EM-1335070000-SP
Basic module	UR20-BM-SP
Plug-in connector unit	UR20-PK-1335070000-SP
Note	
* <sup>1)</sup> 1 roll = 1000 label = 1 Qty. * <sup>2)</sup> 1 sheet = 60 label = 1 Qty.	

Type	Qty.	Order No.
KOSM BHZ5 00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1335070000



Let's connect.

**PF-0-1DI-SIL**

- SIL 3 safety standard in accordance with IEC 62061 and DIN EN ISO 13849-1, category 4, PL e
- Connection for an emergency stop circuit
- OSSD output reports status to control unit
- Pulsed input circuit for wire breakage and short-circuit detection
- Restart: manual or using autostart

**UR20-PF-0-1DI-SIL**



**Technical data**

<b>System data</b>	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
<b>Safety-related data</b>	
Achievable safety standard	IEC 61508 SIL 3 and DIN EN ISO 13849-1:2008 PL e
Level of diagnostic coverage	96.64 %
MTTF <sub>a</sub>	> 100 years (PFH = 6.27 * 10 <sup>-9</sup> 1/h)
SFF	98.58 %
HFT	1
<b>Supply</b>	
Supply voltage for system and inputs	24 V DC +20 % / -15 % via the system bus
Supply voltage for outputs	24 V DC +20 % / -15 %
Maximum feed current for input modules	8 A
Current consumption (internal)	35 mA
<b>Digital inputs</b>	
Wire breakage detection	yes
Short-circuit detection	yes
<b>General data</b>	
Weight	80 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

<b>System data</b>		
Interface	u-remote system bus	
Transmission rate of system bus	48 Mbps	
<b>Safety-related data</b>		
Achievable safety standard	IEC 61508 SIL 3 and DIN EN ISO 13849-1:2008 PL e	
Level of diagnostic coverage	96.64 %	
MTTF <sub>a</sub>	> 100 years (PFH = 6.27 * 10 <sup>-9</sup> 1/h)	
SFF	98.58 %	
HFT	1	
<b>Supply</b>		
Supply voltage for system and inputs	24 V DC +20 % / -15 % via the system bus	
Supply voltage for outputs	24 V DC +20 % / -15 %	
Maximum feed current for input modules	8 A	
Current consumption (internal)	35 mA	
<b>Digital inputs</b>		
Wire breakage detection	yes	
Short-circuit detection	yes	
<b>General data</b>		
Weight	80 g	
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm	

**Ordering data**

<b>Module variants</b>	
Safety module, 1 digital input	

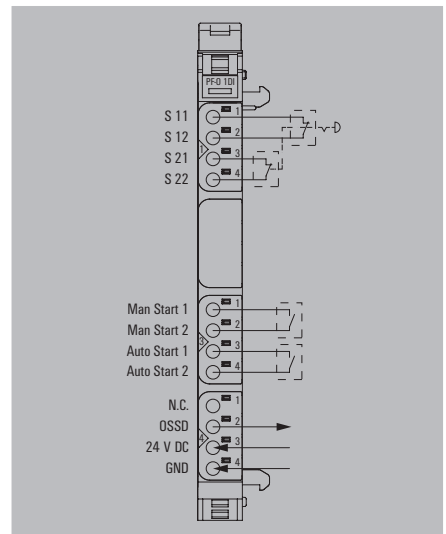
Type	Qty.	Order No.
UR20-PF-0-1DI-SIL	1	1335030000

**Accessories**

<b>Accessories</b>	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
<b>Replacement parts</b>	
Electronics module	
Basic module	
Plug-in connector unit	
<b>Note</b>	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1335030000-SP	1	1347520000
UR20-BM-SIL-SP	5	1350970000
UR20-PK-1335030000-SP	5	1346560000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1335030000



Let's connect.



**PF-0-2DI-SIL**

- SIL 3 safety standard in accordance with IEC 62061 and DIN EN ISO 13849-1, category 4, PL e
- Connection for an emergency stop circuit
- OSSD output reports status to control unit
- Pulsed input circuit for wire breakage and short-circuit detection
- Restart: manual or using autostart

**UR20-PF-0-2DI-SIL**



**Technical data**

<b>System data</b>	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
<b>Safety-related data</b>	
Achievable safety standard	IEC 61508 SIL 3 and DIN EN ISO 13849-1:2008 PL e
Level of diagnostic coverage	96.64 %
MTTF <sub>a</sub>	> 100 years (PFH = 6.27 * 10 <sup>-9</sup> 1/h)
SFF	98.58 %
HFT	1
<b>Supply</b>	
Supply voltage for system and inputs	24 V DC +20 % / -15 % via the system bus
Supply voltage for outputs	24 V DC +20 % / -15 %
Maximum feed current for input modules	8 A
Current consumption (internal)	35 mA
<b>Digital inputs</b>	
Wire breakage detection	yes
Short-circuit detection	yes
<b>General data</b>	
Weight	82 g
Dimensions (H/W/D)	120 mm (with catch lever) 128 mm x 11,5 mm x 76 mm

<b>System data</b>		
Interface	u-remote system bus	
Transmission rate of system bus	48 Mbps	
<b>Safety-related data</b>		
Achievable safety standard	IEC 61508 SIL 3 and DIN EN ISO 13849-1:2008 PL e	
Level of diagnostic coverage	96.64 %	
MTTF <sub>a</sub>	> 100 years (PFH = 6.27 * 10 <sup>-9</sup> 1/h)	
SFF	98.58 %	
HFT	1	
<b>Supply</b>		
Supply voltage for system and inputs	24 V DC +20 % / -15 % via the system bus	
Supply voltage for outputs	24 V DC +20 % / -15 %	
Maximum feed current for input modules	8 A	
Current consumption (internal)	35 mA	
<b>Digital inputs</b>		
Wire breakage detection	yes	
Short-circuit detection	yes	
<b>General data</b>		
Weight	82 g	
Dimensions (H/W/D)	120 mm (with catch lever) 128 mm x 11,5 mm x 76 mm	

**Ordering data**

<b>Module variants</b>	
Safety module, 2 digital inputs	

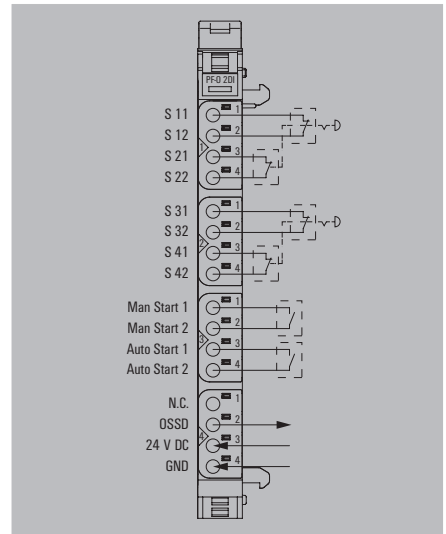
Type	Qty.	Order No.
UR20-PF-0-2DI-SIL	1	1335050000

**Accessories**

<b>Accessories</b>	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
<b>Replacement parts</b>	
Electronics module	
Basic module	
Plug-in connector unit	
<b>Note</b>	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1335050000-SP	1	1347540000
UR20-BM-SIL-SP	5	1350970000
UR20-PK-1335050000-SP	5	1346570000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1335050000



Let's connect.

**PF-0-2DI-DELAY-SIL**

- SIL 3 safety standard in accordance with IEC 62061 and DIN EN ISO 13849-1, category 4, PL e
- Switch-off after adjustable delay
- Connection for an emergency stop circuit
- OSSD output reports status to control unit
- Pulsed input circuit for wire breakage and short-circuit detection
- Restart: manual or using autostart

**UR20-PF-0-2DI-DELAY-SIL**



**Technical data**

<b>System data</b>	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
<b>Safety-related data</b>	
Achievable safety standard	IEC 61508 SIL 3 and DIN EN ISO 13849-1:2008 PL e
Level of diagnostic coverage	96.64 %
MTTF <sub>a</sub>	> 100 years (PFH = 6.27 * 10 <sup>-9</sup> 1/h)
SFF	98.58 %
HFT	1
<b>Supply</b>	
Supply voltage for system and inputs	24 V DC +20 % / -15 % via the system bus
Supply voltage for outputs	24 V DC +20 % / -15 %
Maximum feed current for input modules	8 A
Current consumption (internal)	35 mA
<b>Digital inputs</b>	
Wire breakage detection	yes
Short-circuit detection	yes
<b>General data</b>	
Weight	84 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

<b>System data</b>		
Interface	u-remote system bus	
Transmission rate of system bus	48 Mbps	
<b>Safety-related data</b>		
Achievable safety standard	IEC 61508 SIL 3 and DIN EN ISO 13849-1:2008 PL e	
Level of diagnostic coverage	96.64 %	
MTTF <sub>a</sub>	> 100 years (PFH = 6.27 * 10 <sup>-9</sup> 1/h)	
SFF	98.58 %	
HFT	1	
<b>Supply</b>		
Supply voltage for system and inputs	24 V DC +20 % / -15 % via the system bus	
Supply voltage for outputs	24 V DC +20 % / -15 %	
Maximum feed current for input modules	8 A	
Current consumption (internal)	35 mA	
<b>Digital inputs</b>		
Wire breakage detection	yes	
Short-circuit detection	yes	
<b>General data</b>		
Weight	84 g	
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm	

**Ordering data**

<b>Module variants</b>	
Safety module, 2 digital inputs, delayed	

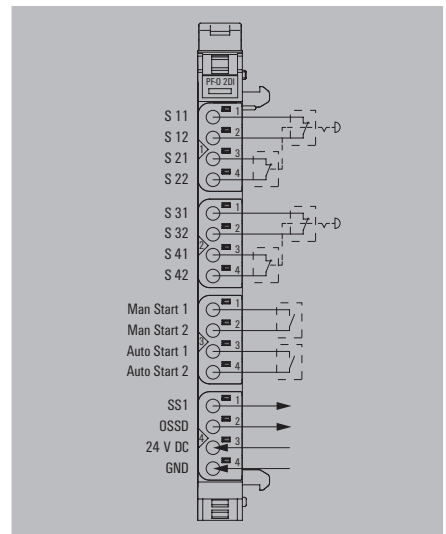
Type	Qty.	Order No.
UR20-PF-0-2DI-DELAY-SIL	1	1335040000

**Accessories**

<b>Accessories</b>	
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	
<b>Replacement parts</b>	
Electronics module	
Basic module	
Plug-in connector unit	
<b>Note</b>	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESO UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
UR20-EM-1335040000-SP	1	1347530000
UR20-BM-SIL-SP	5	1350970000
UR20-PK-1335040000-SP	5	1484100000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
\*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1335040000



Let's connect.

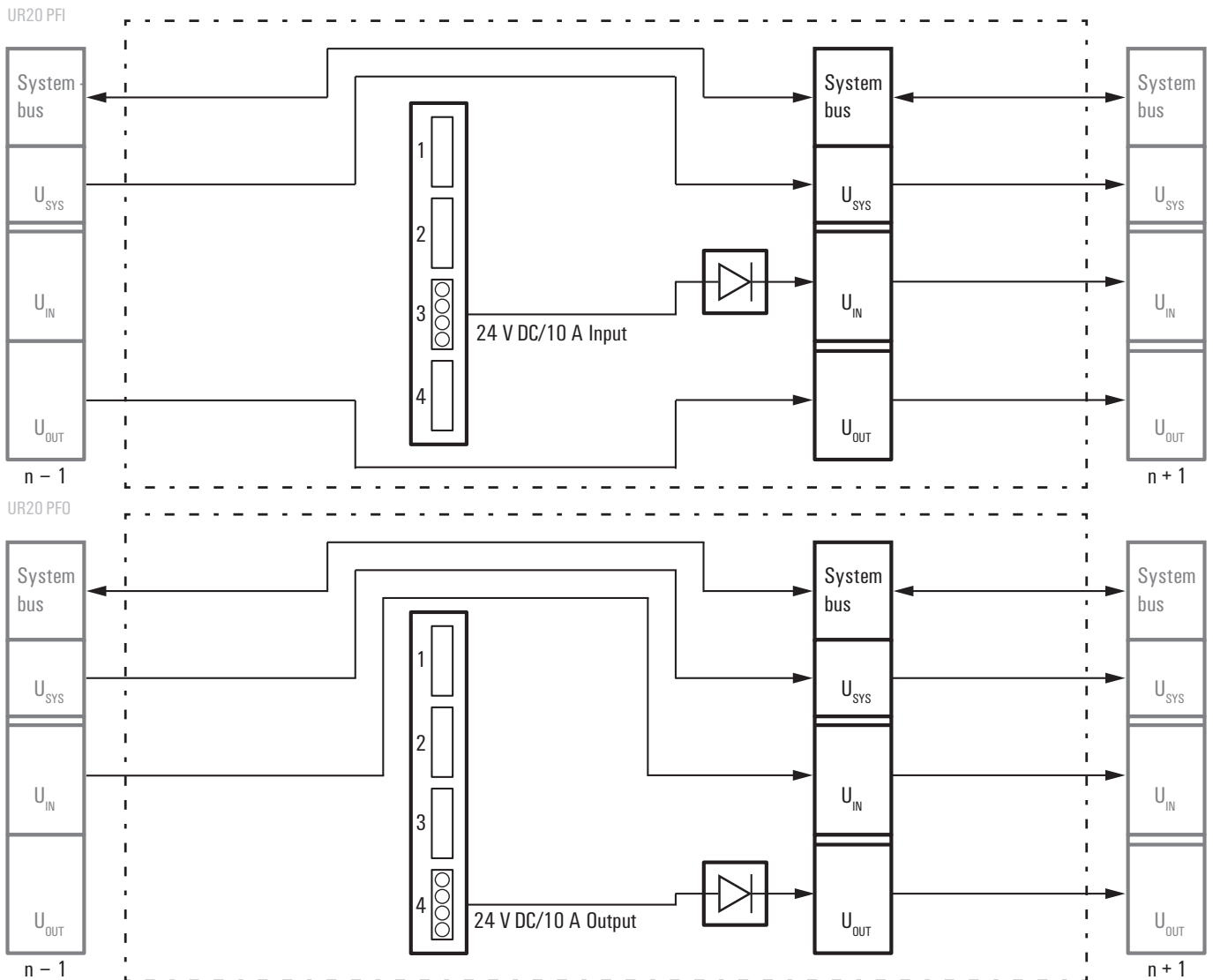
# Power-feed modules

## 10 A feeding; input or output current path; diagnosis visualisation

IP20  
A

Weidmüller power-feed modules are available to refresh the power of the input and output current path. These feed 10 A, monitored by the voltage diagnosis display, in the corresponding input or output path. The time-saving commissioning is guaranteed by the standard u-remote plug with proven and tested "PUSH IN" technology for reliable contacting. The power supply is monitored by a diagnosis display.

**Block diagram UR20-PF-I and UR20-PF-O**



PF-I

- Power supply in input current path
- Power supply current 10 A
- Integrated diagnosis display

UR20-PF-I



Technical data

Supply	
Voltage supply for inputs	24 V DC +20 % / - 15 %
Maximum feed current for input modules	10 A
Current consumption (I <sub>N</sub> in the respective power segment)	10 mA
General data	
Weight	76 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

Ordering data

Module variants	
Power supply module	

Type	Qty.	Order No.
UR20-PF-I	1	1334710000

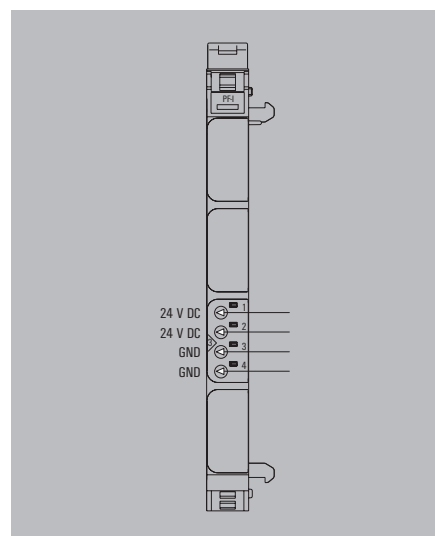
Accessories

Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

Replacement parts	
Electronics module	UR20-EM-1334710000-SP 1 1347380000
Basic module	UR20-BM-PF-I-SP 5 1350940000
Plug-in connector unit	UR20-PK-1334710000-SP 5 1346460000
Note	

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
 \*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1334710000



Let's connect.

PF-0

- Power supply in output current path
- Power supply current 10 A
- Integrated diagnosis display

UR20-PF-0



Technical data

Supply	
Voltage supply for outputs	24 V DC +20 % / - 15 %
Maximum feed current for output modules	10 A
Current consumption ( $I_{OUT}$ in the respective power segment)	10 mA
General data	
Weight	76 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

Ordering data

Module variants	
Power supply module	

Type	Qty.	Order No.
UR20-PF-0	1	1334740000

Accessories

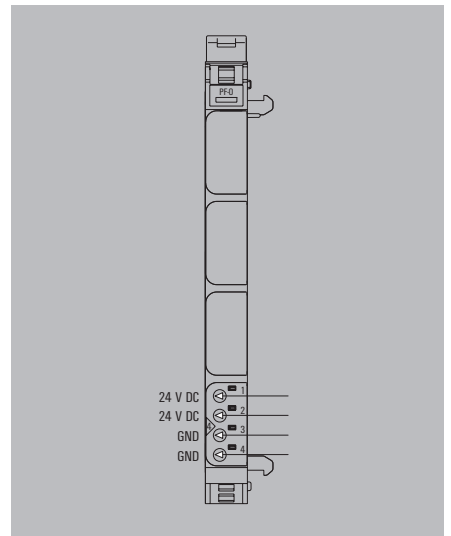
Coding elements	
Termination kit	
Swivel marker	
Connection marker for pusher custom printing	
Connection marker for pusher neutral	
Module marker for custom printing	
Module marker for neutral	
Thermotransfer version (Material: Polyester)	
Thermotransfer version (Material: Polyester)	
Paper version for Laserprinter	

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

Replacement parts			
Electronics module	UR20-EM-1334740000-SP	1	1347420000
Basic module	UR20-BM-PF-0-SP	5	1350950000
Plug-in connector unit	UR20-PK-1334740000-SP	5	1346480000

**Note**

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
 \*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1334740000



Let's connect.



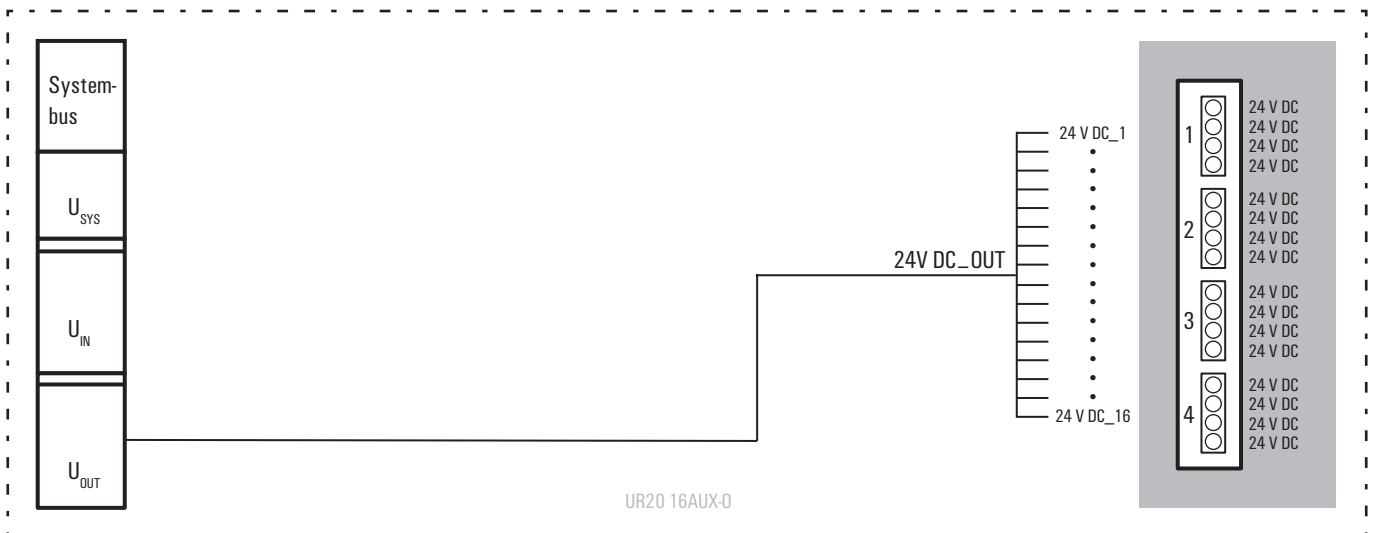
# Accessories

## Potential distribution modules; system accessories

IP20  
A

A wide range of accessory modules is provided for the individual requirements of machine and plant construction. Various potential distribution modules are available for directly supplying sensors with 2-wire, 3-wire or 3-wire+FE connection technology from the remote I/O system. These provide 16 "PUSH IN" potential points and supply your application with each auxiliary potential available. An empty module, where the system bus and voltage supply are looped through, allows you to plan expansion slots in a system and to start these up without any interruptions if required.

### UR20-16AUX-0 block diagram example



AUX

- Distribution of the various potentials
- Actuator and sensor supply
- 16 "PUSH IN" potential contacts

UR20-16AUX



Technical data

<b>Supply</b>
Voltage supply
<b>General data</b>
Weight
Dimensions (H/W/D)

24 V DC +20 % / - 15 % via Input- or output path / FE
84 g
120 mm (with catch lever) 128 mm x 11,5 mm x 76 mm

Ordering data

<b>Module variants</b>
Potential distribution module

Type	Qty.	Order No.
UR20-16AUX-I	1	1334770000
UR20-16AUX-O	1	1334780000
UR20-16AUX-FE	1	1334790000
UR20-16AUX-GND-I	1	1334800000
UR20-16AUX-GND-O	1	1334810000

Accessories

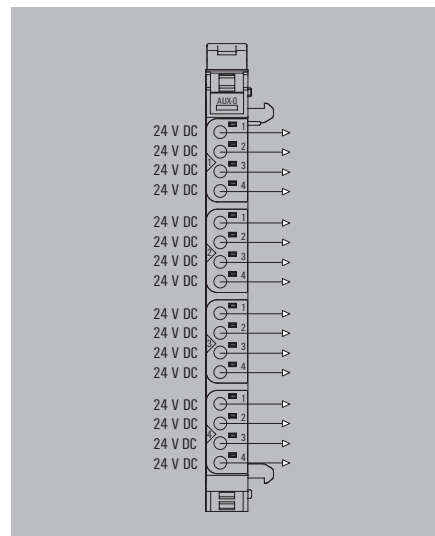
Coding elements
Termination kit
Swivel marker
Connection marker for pusher custom printing
Connection marker for pusher neutral
Module marker for custom printing
Module marker for neutral
Thermotransfer version (Material: Polyester)
Thermotransfer version (Material: Polyester)
Paper version for Laserprinter
USB cable (USB A to Micro USB)
<b>Replacement parts</b>
Electronics module

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000
IE-C6FP8LE0015M40M40-E	1	1487980000

<b>Replacement parts</b>
Electronics module
Basic module
Plug-in connector unit
<b>Note</b>

UR20-EM-1334770000-SP	1	1347450000
UR20-EM-1334780000-SP	1	1347470000
UR20-EM-1334790000-SP	1	1347480000
UR20-EM-1334800000-SP	1	1347490000
UR20-EM-1334810000-SP	1	1347500000
UR20-BM-SP	5	1350930000
UR20-PK-1334770000-SP	5	1346450000
UR20-PK-1334790000-SP	5	1346490000
UR20-PK-1334800000-SP	5	1346470000
UR20-PK-1334780000-SP	5	1484080000
UR20-PK-1334810000-SP	5	1484090000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
 \*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.



Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1334770000
MSIP	MSIP-REM-WMG-1334780000
MSIP	MSIP-REM-WMG-1334790000
MSIP	MSIP-REM-WMG-1334800000
MSIP	MSIP-REM-WMG-1334810000

<p>16AUX-I</p> <p>Let's connect.</p>	<p>16AUX-O</p> <p>Let's connect.</p>	<p>16AUX-FE</p> <p>Let's connect.</p>	<p>16AUX-GND-I</p> <p>Let's connect.</p>	<p>16AUX GND-O</p> <p>Let's connect.</p>
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Empty module

- Forwarding of system bus and voltage paths
- Space for subsequent expansion
- Basis for all I/O modules

UR20-ES



Technical data

General data

Weight	70 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11,5 mm x 76 mm

Ordering data

Module variants

Empty module

Type	Qty.	Order No.
UR20-ES	1	1315770000

Accessories

- Coding elements
- Termination kit
- Swivel marker
- Connection marker for pusher custom printing
- Connection marker for pusher neutral
- Module marker for custom printing
- Module marker for neutral
- Thermotransfer version (Material: Polyester)
- Thermotransfer version (Material: Polyester)
- Paper version for Laserprinter

Replacement parts

- Electronics module
- Basic module
- Plug-in connector unit

Note

Type	Qty.	Order No.
KOSM BHZ5.00	100	1483050000
UR20-EBK-ACC	5	1346610000
UR20-SM-ACC	20	1339920000
PM 2.7/2.6 MC SDR	192	1323700000
PM 2.7/2.6 MC NE WS	960	1323710000
DEK 5/8-11.5 MC SDR	100	1341610000
DEK 5/8-11.5 MC NE WS	500	1341630000
THM UR20 GE * <sup>1)</sup>	1	1429910000
THM UR20 WS * <sup>1)</sup>	1	1429420000
ESD UR20 DIN A4 WS * <sup>2)</sup>	10	1429430000

UR20-EM-1315770000-SP	1	1347370000
UR20-BM-SP	5	1350930000
UR20-PK-1315770000-SP	5	1346510000

\*<sup>1)</sup> 1 roll = 1000 label = 1 Qty.  
 \*<sup>2)</sup> 1 sheet = 60 label = 1 Qty.

Product standard	IEC 61131-2
EMC	EN 61000
ATEX	EN 60079
UL	UL 508
MSIP	MSIP-REM-WMG-1315770000



Let's connect.

Termination kit

- Includes an end plate and two end brackets

UR20-EBK



Ordering data

Module variants

Termination kit

Type	Qty.	Order No.
UR20-EBK-ACC	5	1346610000



# System overview

Below you will find assistance for putting together your system. Please note the maximum number of 64 active modules and the packaging units for the accessories! More detailed technical data and product descriptions can be found here in the catalogue in the corresponding chapter.

At the bottom right-hand side of this page, you will find assistance for supplying the current paths.

## 1. What field bus are you using?

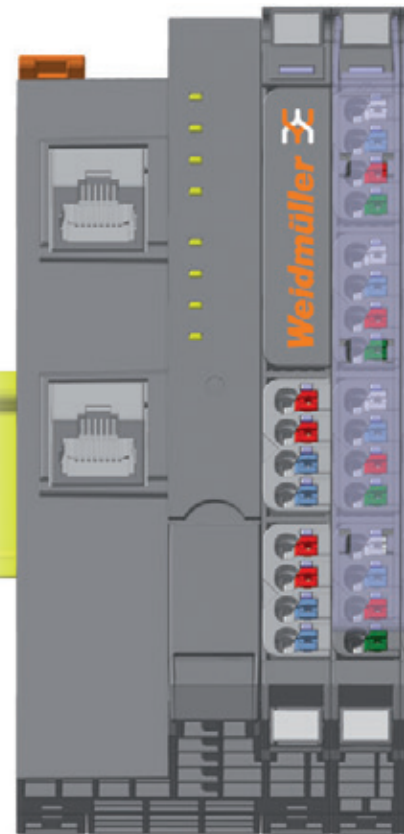
Bus	Type	Order No.	Page
PROFIBUS	UR20-FBC-PB-DP	1334870000	A.9
PROFINET	UR20-FBC-PN-IRT	1334880000	A.11
EtherCAT	UR20-FBC-EC	1334910000	A.13
Modbus	UR20-FBC-MOD-TCP	1334930000	A.15
EtherNet/IP	UR20-FBC-EIP	1334920000	A.17
DeviceNet	UR20-FBC-DN	1334900000	A.19
CANopen	UR20-FBC-CAN	1334890000	A.21

## 2. What signals do you want to process?

Digital inputs	Order No.	Page
UR20-4DI-P	1315170000	A.23
UR20-4DI-P-3W	2009360000	A.24
UR20-8DI-P-2W	1315180000	A.25
UR20-8DI-P-3W	1394400000	A.26
UR20-8DI-P-3W-HD	1315190000	A.27
UR20-16DI-P	1315200000	A.28
UR20-16DI-P-PLC-INT	1315210000	A.29
UR20-2DI-P-TS	1460140000	A.30
UR20-4DI-P-TS	1460150000	A.31
UR20-4DI-N	1315350000	A.32
UR20-8DI-N-3W	1315370000	A.33
UR20-16DI-N	1315390000	A.34
UR20-16DI-N-PLC-INT	1315400000	A.35
UR20-4DI-2W-230V-AC	1550070000	A.36
Digital outputs	Order No.	Page
UR20-4DO-P	1315220000	A.39
UR20-4DO-2A	1315230000	A.40
UR20-4DO-PN-2A	1394420000	A.41
UR20-8DO-P	1315240000	A.42
UR20-8DO-P-2W-HD	1509830000	A.43
UR20-16DO-P	1315250000	A.44
UR20-16DO-P-PLC-INT	1315270000	A.45
UR20-4DO-N	1315410000	A.46
UR20-4DO-N-2A	1315420000	A.47
UR20-8DO-N	1315430000	A.48
UR20-16DO-N	1315440000	A.49
UR20-16DO-N-PLC-INT	1315450000	A.50
UR20-4RO-SSR-255	1315540000	A.51
UR20-4RO-CO-255	1315550000	A.52
UR20-2PWM-PN-0.5A	1315600000	A.55
UR20-2PWM-PN-2A	1315610000	A.56

## 2. What signals do you want to process?

Analogue inputs	Order No.	Page
UR20-4AI-UI-12	1394390000	A.59
UR20-4AI-UI-16	1315620000	A.60
UR20-4AI-UI-16-DIAG	1315690000	A.61
UR20-4AI-UI-16-HD	1506920000	A.62
UR20-4AI-UI-16-DIAG-HD	1506910000	A.63
UR20-8AI-16-HD	1315650000	A.64
UR20-8AI-16-DIAG-HD	1315720000	A.65
UR20-8AI-PLC-INT	1315670000	A.66
UR20-4AI-UI-DIF-16-DIAG	1993880000	A.67
UR20-4AI-TC-DIAG	1315710000	A.69
UR20-4AI-RTD-DIAG	1315700000	A.70
UR20-4AI-R-HS-16-DIAG	2001670000	A.71
UR20-3EM-230V-AC	2007420000	A.73
Analogue outputs	Order No.	Page
UR20-4AO-UI-16	1315680000	A.75
UR20-4AO-UI-16-DIAG	1315730000	A.76
UR20-4AO-UI-16-HD	1510690000	A.77
UR20-4AO-UI-16-DIAG-HD	1506930000	A.78
Further functional modules	Order No.	Page
UR20-1CNT-100-100	1315570000	A.81
UR20-2CNT-100	1315590000	A.82
UR20-1CNT-500	1315580000	A.83
UR20-2FCNT-100	1508080000	A.84
UR20-1SSI	1508090000	A.85
UR20-1COM-232-485-422	1315750000	A.86
UR20-1COM-SAI-PRO	2007430000	A.87
UR20-4DI-4DO-PN-FSOE	1529780000	A.89
UR20-8DI-PN-FSOE	1529800000	A.90
UR20-4DI-4DO-PN-FSPS	1335060000	A.91
UR20-8DI-PN-FSPS	1335070000	A.92
UR20-PF-0-1DI-SIL	1335030000	A.93
UR20-PF-0-2DI-SIL	1335050000	A.94
UR20-PF-0-2DI-DELAY-SIL	1335040000	A.95



3. Do you need more than 10 A on the input or output path? Then you will need an additional supply! There is a sample calculation at the bottom of this page.

	Order No.	Page
UR20-PF-I	1334710000	A.97
UR20-PF-O	1334740000	A.98

#### 4. AUX and accessories

AUX	Order No.	Page
UR20-16AUX-I	1334770000	A.101
UR20-16AUX-O	1334780000	A.101
UR20-16AUX-FE	1334790000	A.101
UR20-16AUX-GND-I	1334800000	A.101
UR20-16AUX-GND-O	1334810000	A.101
Accessories		Page
End bracket	1346610000	A.101
Swivel marker	1339920000	A.101
Connection marker for pusher custom printing	1323700000	A.101
Connection marker for pusher neutral	1323710000	A.101
Module marker for custom printing	1341610000	A.101
Module marker for neutral	1341630000	A.101
Empty module	1315770000	A.101
Thermotransfer version (Material: Polyester)	1429910000	A.101
Thermotransfer version (Material: Polyester)	1429420000	A.101
Paper version for Laserprinter	1429430000	A.101



The additional supply calculation is different for each application. Simultaneity factors and current requirement must be known. To assist you, we have produced the example shown here in a simplified form.

Our example uses a row of 8-DO modules, i.e. units which can hold four actuator connections each. The actual current needed and therefore the position for a power-feed module to supply the current path can be determined from the mathematical combination of current requirement and simultaneity factor. Please note that u-remote provides an input and an output current path. Both must be included in the additional supply calculation. The system voltage doesn't have to be taken into account.

#### Sample calculation

Module no.	Module type	Current requirement of connected devices (A)	Simultaneity factor	Current following calculation of simultaneity factor per module	Current requirement of system - cumulative	Current requirement of system - cumulative with UR20-PF-O
1st module	UR20-8DO-P	0.5	0.5	0.25	0.25	0.25
2nd module	UR20-8DO-P	0.3	0.5	0.15	0.4	0.4
3rd module	UR20-8DO-P	2.0	0.7	1.4	1.8	1.8
4th module	UR20-8DO-P	2.0	0.5	1	2.8	2.8
5th module	UR20-8DO-P	2.0	0.3	2	4.8	4.8
6th module	UR20-8DO-P	0.5	0.2	0.1	4.9	4.9
7th module	UR20-8DO-P	1.0	0.1	0.75	5.65	5.65
8th module	UR20-8DO-P	1.0	0.2	0.2	5.85	5.85
9th module	UR20-8DO-P	1.2	0.5	0.6	6.45	6.45
10th module	UR20-8DO-P	2.0	1.0	2	8.45	8.45
	<b>UR20-PF-O</b>					
11th module	UR20-8DO-P	2.0	1.0	2	10.45	2
12th module	UR20-8DO-P	3.0	1.0	1	11.45	3
13th module	UR20-8DO-P	2.0	1.0	2	13.45	5

**Current requirement exceeds 10 A!**  
The output current path therefore needs an additional supply before the 11th module.

10 A supplied by the UR20-PF-O module.  
The 1.55 A calculated as remaining after the 10th module must not be added to the 10 A after the UR20-PF-O module!



## Robust, powerful and communicative u-remote IP67

IP67

B



When constructing machines and plants, sensors and actuators have to be connected to the control unit such that all these signals can be collected locally using fieldbuses.

The u-remote IP67 product family solves this problem by means of IP67 protected encapsulation at the very point where the sensors and actuators are located. In the variants with a sub-bus system, this is done very flexibly and in a wide range of applications.



# IP67

<b>IP67</b>	Introduction	B.2
	Quick Reference IP67 remote I/O modules	B.6
	u-remote IP67 – PROFINET, IO-Link, Multiprotocol	B.8
	u-remote IP67 – PROFIBUS	B.14
	SAI Active Universal – Overview	B.20
	SAI Active Universal – CANopen	B.21
	SAI Active Universal – DeviceNet™	B.26
	SAI Active Universal Pro – Overview	B.30
	SAI Active Universal Pro	B.32
	Accessories for sensor cables	B.40

# Remote I/O system in class of protection IP67

## Flexible sensor/actuator coupling to control systems in IP67 area in industrial environment

### B

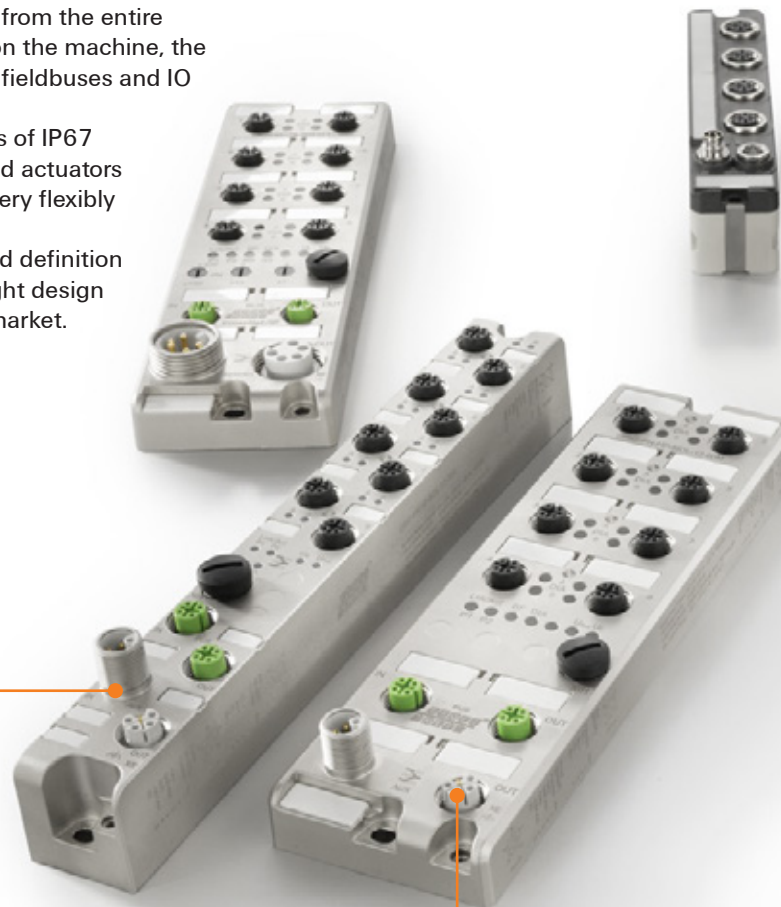
In both machine and plant construction, sensors and actuators from the entire machine have to be connected to the control unit. Depending on the machine, the size and also the count of the signals may be very large so that fieldbuses and IO systems can be used to collect the signals locally.

The u-remote IP67 product family solves this problem by means of IP67 protected encapsulation at the very point where the sensors and actuators are located. In the variants with a subbus system, this is done very flexibly and in a wide range of applications.

Direct incorporation in the PLC programming environment, rapid definition of causes in the event of faults and a very narrow and lightweight design are the characteristics which make this system unique on the market.

#### Improved Connectivity Technology

With M12 L-coding the ampacity of the connectors has been increased to 16 A. For a control of significantly more actuators and therefore more decentral remote I/Os are possible. Take advantage of the opportunities for more flexible planning in your system!



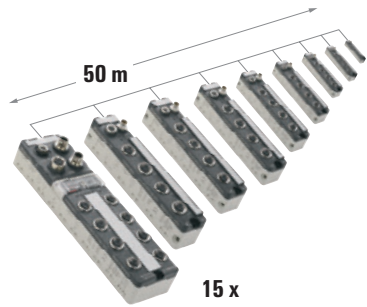
#### Efficient engineering

Direct incorporation and configuration in the standard PLC engineering systems with webserver



**50 % reduced costs through flexible sub-bus concept**

Sub-bus length of up to 50 m with up to 15 slaves per sub-bus enables an extremely flexible setup.



**Remote I/O system as complete system on the panel**

An extremely wide range of sensor and actuator cables, fieldbus cables and customisable plug-in connectors round off the range.



**Freedom of choice**

Support for all common field bus systems.



**Advanced diagnostic capabilities**  
A channel wise diagnosis based on two-colored LEDs will quickly and clearly shows the state of the individual channels on site!



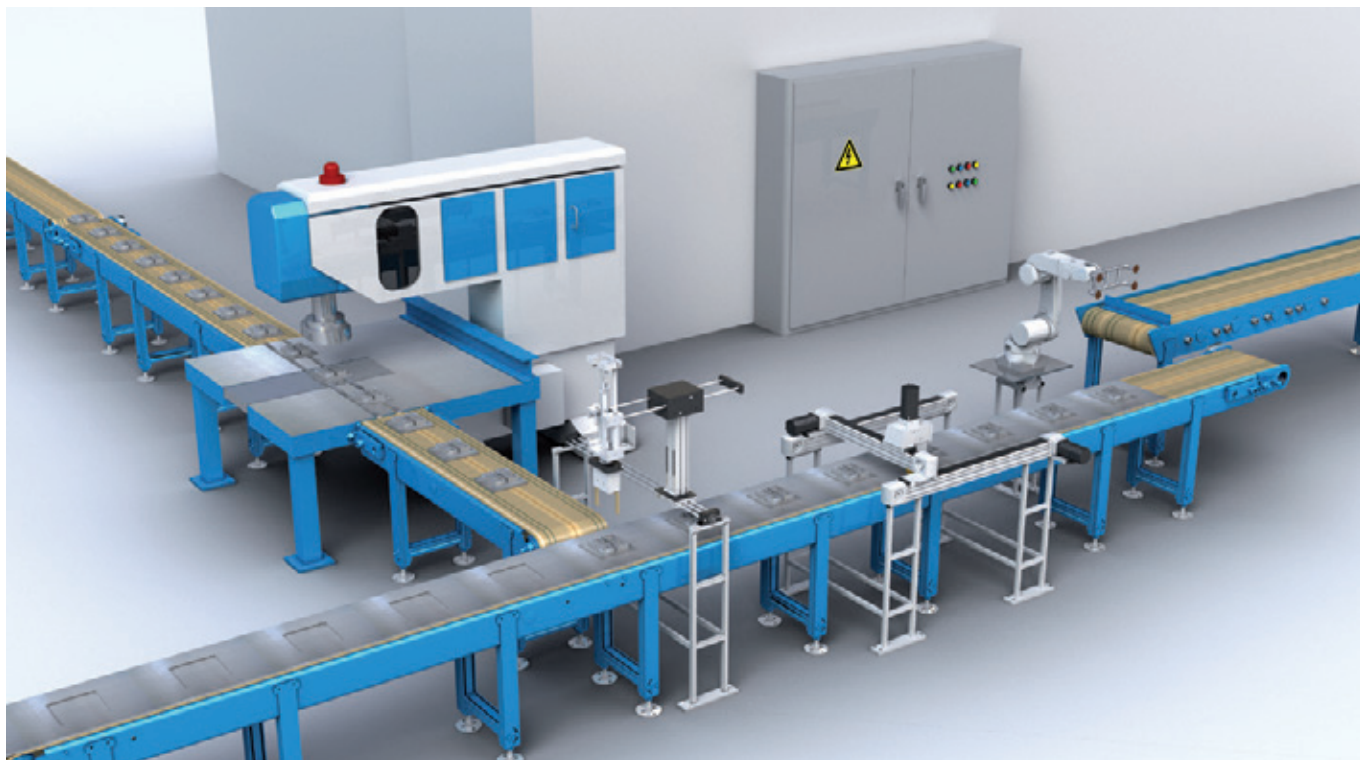


## Challenging production tasks present you with motion and distribution

We present u-remote for a secure processing of your sensor and actuator signals

IP67

B



Complex production processes mean that you have to co-ordinate lots of individual processing stages. Numerous sensors and actuators throughout the production facility are connected with the central control system. And in many cases, you have to bridge huge distances and process a large number of different signals.

Weidmüller's u-remote IP67 product range equips you for this production process chain in a practical way. Thanks to IP67-rated encapsulation, the remote I/O systems can be positioned directly where sensors and actuators are active. The SAI-PRO variants with sub-bus system also greatly increase your flexibility: the sub-bus system SAI-PRO can be extended to a length of up to 50 m with up to 15 modules. Up to 120 inputs or outputs are therefore possible on one fieldbus node.

Various versions of encapsulated SAI cables make the sensors and actuators accessible. You can also route fieldbus cables straight from the switch cabinet with the energy supply lines using modular, heavy-duty plug-in connectors of the RockStar® concept. This allows you to integrate several stages of production into your production facility with just one single module.

Other benefits of the u-remote family include a direct interface to your PLC programming environment and precise error analyses with visual status display. Let's connect.



Selection table

Order No.	Product designation	Connection system			Communication						
		M8	M12	7/8"	CANopen	DeviceNet™	Modbus ASCII (RS-232/USB)	Subbus	PROFIBUS	PROFINET	MP = PN & EIP
<b>u-remote UR67</b>											
2426250000	UR67-PN-HP-8IOL-12-30M		X							X	
2426260000	UR67-PN-HP-8IOL-12-60M		X							X	
2426270000	UR67-MP-HP-16DI-12-M60		X								X
2426280000	UR67-MP-HP-16DO-12-M60		X								X
2426290000	UR67-MP-HP-8DI/DO-12-60M		X								X
2426320000	UR67-MP-78-8DI/DO-12-60M			X							X
2426300000	UR67-MP-78-16DI-12-60M			X							X
2426310000	UR67-MP-78-16DO-12-60M			X							X
2426360000	UR67-PB-12-8DI-8-30K		X					X			
2426330000	UR67-PB-12-8DIO-8-30K		X					X			
2426370000	UR67-PB-78-16DI-12-60K			X				X			
2426340000	UR67-PB-78-16DIO-12-60K			X				X			
2426390000	UR67-PB-78-16DI-12-60M			X				X			
2426400000	UR67-PB-78-16DO-12-60M			X				X			
2426380000	UR67-PB-78-8DI/DO-12-60M			X				X			
<b>SAI Aktiv Universal</b>											
1906680000	SAI-AU M8 CAN 16DI	X			X						
1906690000	SAI-AU M8 CAN 16DI/8DO	X			X						
1906650000	SAI-AU M12 CAN 16DI		X		X						
1906660000	SAI AU M12 CAN 16DI/8DO		X		X						
1906670000	SAI-AU M12 CAN AI/AO/DI		X		X						
1906730000	SAI-AU M8 DN 16DI	X				X					
1906740000	SAI AU M8 DN 16DI/8DO	X				X					
1906700000	SAI-AU M12 DN 16DI		X			X					
1906710000	SAI AU M12 DN 16DI/8DO		X			X					
1906720000	SAI-AU M12 DN AI/AO/DI		X			X					
<b>SAI Aktiv Universal Pro</b>											
1938570000	SAI-AU M12 DN GW 16DI		X			X		X			
1938600000	SAI-AU M8 SB 8DI	X						X			
1938660000	SAI-AU M8 SB 8DO 2A	X						X			
1938630000	SAI-AU M8 SB 8DIO	X						X			
1938610000	SAI-AU M12 SB 8DI		X					X			
1938680000	SAI-AU M12 SB 8DO 2A		X					X			
1938640000	SAI-AU M12 SB 8DIO		X					X			
1938690000	SAI-AU M12 SB 4AI		X					X			
1938700000	SAI-AU M12 SB 4AO		X					X			
1938730000	SAI-AU M12 SB 2Counter		X					X			
1938720000	SAI-AU M12 SB 4Thermo		X					X			
1938710000	SAI-AU M12 SB 4PT100		X					X			

	Inputs						Outputs				Supply voltage feed circuits	Special characteristics	Page
	IO-Link	Digital	Analogue	Counter	TC	RTD	Digital	Output current	Analogue	Output range			
	4xTyp A & 4xTyp B											- Max. total current module = 16 A	B.10
	4xTyp A & 4xTyp B											- Max. total current module = 16 A	B.10
		16										- Max. total current module = 9 A	B.11
							16	2 A					B.11
		8					8	2 A				- Max. total current module = 9 A	B.12
		8					8	2 A				- Max. total current module = 9 A	B.12
		16											B.13
							16	2 A				- Max. total current module = 9 A	B.13
		8											B.18
		8					8	0,5 A				- Max. total current module = 4 A	B.18
		16											B.19
		16					16	1,6 A				- Max. total current module = 9 A	B.19
		16											B.20
							16	1,6 A				- Max. total current module = 9 A	B.20
		8					8	1,6 A				- Max. total current module = 9 A	B.21
		16									2		B.26
		max. 16, min. 8 (can be configured)					max. 8, min. 0 (can be configured)	0,5 A				4 - Max. I/O channels = 16	B.26
		16									2		B.26
		max. 16, min. 8 (can be configured)					max. 8, min. 0 (can be configured)	0,5 A				4 - Max. I/O channels = 16	B.26
		4	4						2	-10...+10 V, 0...+10 V, 0...20 mA, 4...20 mA	2		B.27
		16									2		B.30
		max. 16, min. 8 (can be configured)					max. 8, min. 0 (can be configured)	0,5 A				4 - Max. I/O channels = 16	B.30
		16									2		B.30
		max. 16, min. 8 (can be configured)					max. 8, min. 0 (can be configured)	0,5 A				4 - Max. I/O channels = 16	B.30
		4	4						2	-10...+10 V, 0...+10 V, 0...20 mA, 4...20 mA	2		B.31
		16									2		B.36
		8											B.38
							8	2 A			2	- Max. total current, output = 8 A	B.38
		max. 8, min. 0 (can be configured)					max. 8, min. 0 (can be configured)	0,5 A				2 - Max. I/O channels = 8	B.38
		8										- Max. total current, output = 4 A	B.38
							8	2 A			2	- Max. I/O channels = 8	B.38
												- Max. total current, output = 4 A	B.38
		max. 8, min. 0 (can be configured)					max. 8, min. 0 (can be configured)	0,5 A			2	- Max. I/O channels = 8	B.38
			4						4	-10...+10 V, 0...+10 V, 0...20 mA, 4...20 mA			B.39
													B.39
				2							2		B.40
					4								B.40
						4							B.41

## Decentralised collection and forwarding of signals on the panel

### u-remote modules in IP67: robust, versatile and flexible

#### B

The progressive decentralisation causes that more and more automation systems are being brought out from the control cabinet into the field. This opens up a wide range of opportunities but also conceals complex challenges.

u-remote IP67 modules bring more power to the system, as 16 A can be supplied through their L-coded plugs. The most compact design in the market and multi-protocol modules with PROFINET and Ethernet/IP are among the other outstanding features of the new member of the u-remote family.

The new IP67 Remote I/O modules increase the performance and efficiency of your plants and make optimum use of the available space thanks to the two designs available. The technical properties are impressive even at the system planning and assembly stage.



IP67 remote I/O modules are used wherever there are increased requirements in terms of particle and humidity protection. With u-remote, you can increase efficiency and open up new potential solutions - discover the variety!

## Your special advantages:

### More efficient and flexible system design

The increasing power-supply energy opens up more efficient design options: up to 17 x 16 DI modules can be wired in a line, which considerably reduces expense. Thanks to the L-coded plug, only one module and a cable set needs to be stocked each for PROFINET and EtherNet/IP.

**One module for two protocols**

Whether PROFINET or Ethernet/IP: thanks to the multi-protocol module of u-remote, you only need one remote I/O module on stock.



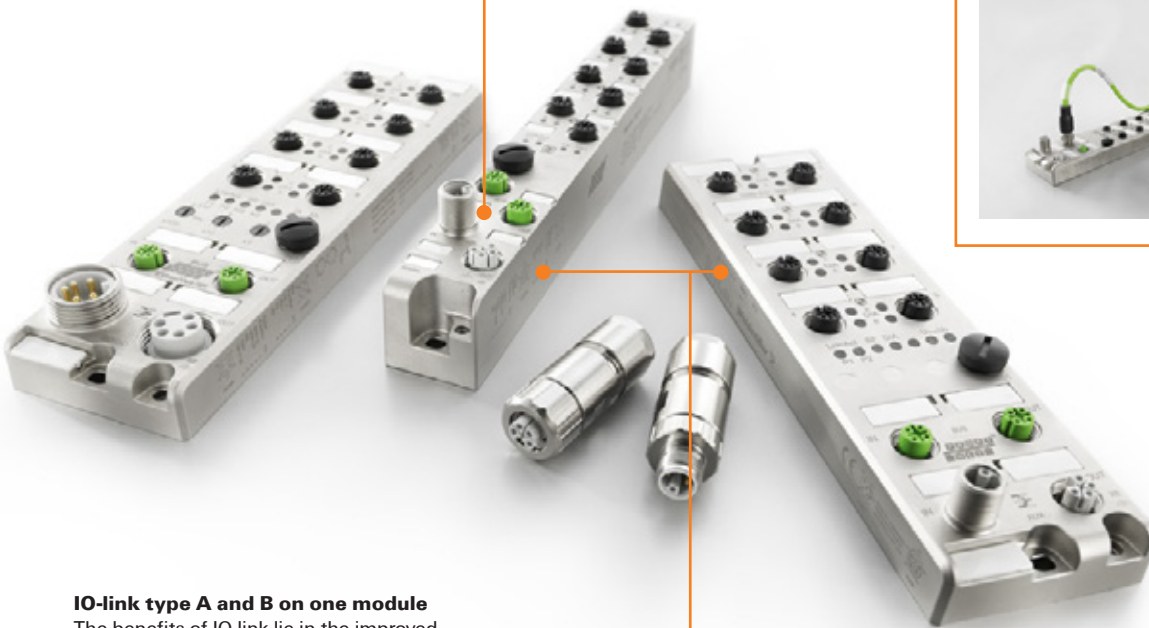
**Maximum power in the system**

The L-coded plug makes a 16 A power supply possible. It allows a greater number of consumers which can be wired in a line and thus reduces the level of cabling.



**Extension of the remote I/O system**

The IP67 remote I/O modules are an extension of the innovative u-remote system. To allow the simple completion of your overall solution, power supplies and switches, cables and plugs also come from Weidmüller.



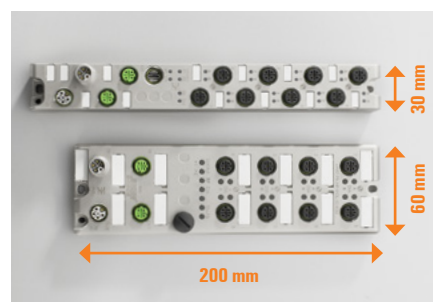
**IO-link type A and B on one module**

The benefits of IO-link lie in the improved parameter and diagnostic properties for the connected sensors and actuators. On the type B ports actuators with up to 2 A can be connected. Additionally every port can be configured as an input or an output.



**Compact designs**

The 30 mm wide design is particularly suited to confined spaces. Even the short length of the modules and their low weight are to be highlighted as they offer advantages for many applications.



**PROFINET**  
Remote I/O for digital signal processing



**UR67-PN-HP-8IOL-12-30M**



**UR67-PN-HP-8IOL-12-60M**



**Ordering data**

Module variants
IO-Link, 4x Type A, 4x Type B
Note

Type	Qty.	Order No.
UR67-PN-HP-8IOL-12-30M	1	2426250000

Type	Qty.	Order No.
UR67-PN-HP-8IOL-12-60M	1	2426260000

Connections
Fieldbus (BUS-IN)
Fieldbus (BUS-OUT)
Supply voltage (AUX-IN)
Supply voltage (AUX-OUT)
I/O connections
Voltage supply
Operating voltage
Current consumption module electronic
Digital inputs
IO-Link standard
Galvanic isolation
Input current, low
Input current, high
Reverse polarity protection
Short-circuit protection
Overload protection
Status indicator
Diagnosis indication
Digital outputs
max. current-carrying capacity per output signal
Output voltage, low
Output voltage, high
Max. total current outputs
Reverse polarity protection
Short-circuit protection
Overload protection
Status indicator
Diagnosis indication
Fieldbus
Bus system
Transmission rate
Addressing
General data
L x W x H
Weight
Protection degree
Operating temperature
Housing main material / UL 94 flammability rating

1x M12 female 4-pole, D-coded
1x M12 female 4-pole, D-coded
1x M12 plug 5-pole, L-coded
1x M12 socket 5-pole, L-coded
8 x M12 socket 5-pole, A-coded
24 V ( (18 V DC ... 30 V DC))
typ. 160 mA
IO-Link v.1.1, IEC 61131-9
Yes, 2000 V DC
Type 1 / IEC 61131-2
Type 1 / IEC 61131-2
Yes
Yes
Yes
Channel wise, via LED, yellow
Channel wise, via LED, red
0.5 A / 2 A
min. (UAux -1 V)
max. 2 V
9 A
Yes
Yes
Yes
Channel wise, via LED, yellow
Channel wise, via LED, red
PROFINET V2.3
10/100 Mbit/s
DCP
225 mm / 30 mm / 30 mm
480 g
IP67
-20 °C...70 °C
Zinc diecast / UL 94

1x M12 female 4-pole, D-coded
1x M12 female 4-pole, D-coded
1x M12 plug 5-pole, L-coded
1x M12 socket 5-pole, L-coded
8 x M12 socket 5-pole, A-coded
24 V ( (18 V DC ... 30 V DC))
typ. 160 mA
IO-Link v.1.1, IEC 61131-9
Yes, 2000 V DC
Type 1 / IEC 61131-2
Type 1 / IEC 61131-2
Yes
Yes
Yes
Channel wise, via LED, yellow
Channel wise, via LED, red
0.5 A / 2 A
min. (UAux -1 V)
max. 2 V
9 A
Yes
Yes
Yes
Channel wise, via LED, yellow
Channel wise, via LED, red
PROFINET V2.3
10/100 Mbit/s
DCP
200 mm / 59.6 mm / 17.6 mm
500 g
IP67
-20 °C...70 °C
Zinc diecast / UL 94

Note

Download of GSDML-file on [www.weidmueller.com](http://www.weidmueller.com)

Download of GSDML-file on [www.weidmueller.com](http://www.weidmueller.com)



## Multiprotokoll

### Remote I/O for digital signal processing



#### Ordering data

Module variants
16 digital inputs 16 digital outputs
Note

#### Connections

Fieldbus (BUS-IN)  
Fieldbus (BUS-OUT)  
Supply voltage (AUX-IN)  
Supply voltage (AUX-OUT)  
I/O connections

#### Voltage supply

Operating voltage  
Current consumption module electronic

#### Digital inputs

Input current, low  
Input current, high  
Reverse polarity protection  
Short-circuit protection  
Overload protection  
Status indicator  
Diagnosis indication

#### Digital outputs

max. current-carrying capacity per output signal  
Output voltage, low  
Output voltage, high  
Max. total current outputs  
Reverse polarity protection  
Short-circuit protection  
Overload protection  
Status indicator  
Diagnosis indication

#### Fieldbus

Bus system  
Transmission rate  
Addressing

#### General data

L x W x H  
Weight  
Protection degree  
Operating temperature  
Housing main material / UL 94 flammability rating

#### UR67-MP-HP-16DI-12-M60



Type	Qty.	Order No.
UR67-MP-HP-16DI-12-60M	1	2426270000
Note		

1x M12 female 4-pole, D-coded
1x M12 female 4-pole, D-coded
1x M12 plug 5-pole, L-coded
1x M12 socket 5-pole, L-coded
8 x M12 socket 5-pole, A-coded
24 V ( (18 V DC ... 30 V DC))
typ. 100 mA
Type 1 / IEC 61131-2
Type 1 / IEC 61131-2
Yes
Yes
Yes
Channel wise, via LED, yellow
Channel wise, via LED, red
9 A
PROFINET V2.3, EtherNet/IP, Multiprotocol
10/100 Mbit/s
Via rotary coding switch, DCP
200 mm / 59.6 mm / 17.6 mm
500 g
IP67
-20 °C...70 °C
Zinc diecast / UL 94

#### UR67-MP-HP-16DO-12-M60



Type	Qty.	Order No.
UR67-MP-HP-16DO-12-60M	1	2426280000
Note		

1x M12 female 4-pole, D-coded
1x M12 female 4-pole, D-coded
1x M12 plug 5-pole, L-coded
1x M12 socket 5-pole, L-coded
8 x M12 socket 5-pole, A-coded
24 V ( (18 V DC ... 30 V DC))
typ. 100 mA
2 A
min. (U <sub>0</sub> -1)
max. 2 V
9 A
Yes
Yes
Yes
Channel wise, via LED, yellow
Channel wise, via LED, red
PROFINET V2.3, EtherNet/IP, Multiprotocol
10/100 Mbit/s
Via rotary coding switch, DCP
200 mm / 59.6 mm / 17.6 mm
500 g
IP67
-20 °C...70 °C
Zinc diecast / UL 94

#### Note

Download of configuration-file on [www.weidmueller.com](http://www.weidmueller.com)

Download of configuration-file on [www.weidmueller.com](http://www.weidmueller.com)



**Multiprotokoll**  
Remote I/O for digital signal processing



EtherNet/IP™

Multiprotocol

**Ordering data**

Module variants
8 digital inputs and 8 digital outputs
Note

**Connections**

Fieldbus (BUS-IN)  
Fieldbus (BUS-OUT)  
Supply voltage (AUX-IN)  
Supply voltage (AUX-OUT)  
I/O connections

**Voltage supply**

Operating voltage  
Current consumption module electronic

**Digital inputs**

Input current, low  
Input current, high  
Reverse polarity protection  
Short-circuit protection  
Overload protection  
Status indicator  
Diagnosis indication

**Digital outputs**

max. current-carrying capacity per output signal  
Output voltage, low  
Output voltage, high  
Max. total current outputs  
Reverse polarity protection  
Short-circuit protection  
Overload protection  
Status indicator  
Diagnosis indication

**Fieldbus**

Bus system  
Transmission rate  
Addressing

**General data**

L x W x H  
Weight  
Protection degree  
Operating temperature  
Housing main material / UL 94 flammability rating

**UR67-MP-HP-8DIDO-12-60M**



Type	Qty.	Order No.
UR67-MP-HP-8DIDO-12-60M	1	2426290000
Note		

**Connections**

1x M12 female 4-pole, D-coded  
1x M12 female 4-pole, D-coded  
1x M12 plug 5-pole, L-coded  
1x M12 socket 5-pole, L-coded  
8 x M12 socket 5-pole, A-coded

**Voltage supply**

24 V ( 18 V DC ... 30 V DC)  
typ. 100 mA

**Digital inputs**

Type 1 / IEC 61131-2  
Type 1 / IEC 61131-2  
Yes  
Yes  
Yes  
Channel wise, via LED, yellow  
Channel wise, via LED, red

**Digital outputs**

2 A  
min. (U<sub>L</sub> -1)  
max. 2 V  
9 A  
Yes  
Yes  
Yes  
Channel wise, via LED, yellow  
Channel wise, via LED, red

**Fieldbus**

PROFINET V2.3, EtherNet/IP, Multiprotocol  
10/100 Mbit/s  
Via rotary coding switch, DCP

**General data**

200 mm / 59.6 mm / 17.6 mm  
500 g  
IP67  
-20 °C...70 °C  
Zinc diecast / UL 94

**UR67-MP-78-8DIDO-12-60M**



Type	Qty.	Order No.
UR67-MP-78-8DIDO-12-60M	1	2426320000
Note		

**Connections**

1x M12 female 4-pole, D-coded  
1x M12 female 4-pole, D-coded  
1x 7/8" plug 5-pole  
1x 7/8" socket 5-pole  
8 x M12 socket 5-pole, A-coded

**Voltage supply**

24 V ( 18 V DC ... 30 V DC)  
typ. 100 mA

**Digital inputs**

Type 1 / IEC 61131-2  
Type 1 / IEC 61131-2  
Yes  
Yes  
Yes  
Channel wise, via LED, yellow  
Channel wise, via LED, red

**Digital outputs**

2 A  
min. (U<sub>L</sub> -1)  
max. 2 V  
9 A  
Yes  
Yes  
Yes  
Channel wise, via LED, yellow  
Channel wise, via LED, red

**Fieldbus**

PROFINET V2.3, EtherNet/IP, Multiprotocol  
10/100 Mbit/s  
Via rotary coding switch, DCP

**General data**

206 mm / 59.6 mm / 17.3 mm  
520 g  
IP67  
-20 °C...70 °C  
Zinc diecast / UL 94

Note

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**Multiprotokoll**  
Remote I/O for digital signal processing



**UR67-MP-78-16DI-12-60M**



**UR67-MP-78-16DO-12-60M**



**Ordering data**

Module variants
16 digital inputs 16 digital outputs
<b>Note</b>

Type	Qty.	Order No.
UR67-MP-78-16DI-12-60M	1	2426300000
<b>Note</b>		

Type	Qty.	Order No.
UR67-MP-78-16DO-12-60M	1	2426310000
<b>Note</b>		

Connections
Fieldbus (BUS-IN)
Fieldbus (BUS-OUT)
Supply voltage (AUX-IN)
Supply voltage (AUX-OUT)
I/O connections
Voltage supply
Operating voltage
Current consumption module electronic
Digital inputs
Input current, low
Input current, high
Reverse polarity protection
Short-circuit protection
Overload protection
Status indicator
Diagnosis indication
Digital outputs
max. current-carrying capacity per output signal
Output voltage, low
Output voltage, high
Max. total current outputs
Reverse polarity protection
Short-circuit protection
Overload protection
Status indicator
Diagnosis indication
Fieldbus
Bus system
Transmission rate
Addressing
General data
L x W x H
Weight
Protection degree
Operating temperature
Housing main material / UL 94 flammability rating

1x M12 female 4-pole, D-coded
1x M12 female 4-pole, D-coded
1x 7/8" plug 5-pole
1x 7/8" socket 5-pole
8 x M12 socket 5-pole, A-coded
24 V ( (18 V DC ... 30 V DC))
typ. 100 mA
Type 1 / IEC 61131-2
Type 1 / IEC 61131-2
Yes
Yes
Yes
Channel wise, via LED, yellow
Channel wise, via LED, red
PROFINET V2.3, EtherNet/IP, Multiprotocol
10/100 Mbit/s
Via rotary coding switch, DCP
206 mm / 59.6 mm / 17.3 mm
520 g
IP67
-20 °C...70 °C
Zinc diecast / UL 94

1x M12 female 4-pole, D-coded
1x M12 female 4-pole, D-coded
1x 7/8" plug 5-pole
1x 7/8" socket 5-pole
8 x M12 socket 5-pole, A-coded
24 V ( (18 V DC ... 30 V DC))
typ. 100 mA
2 A
min. (U <sub>0</sub> -1)
max. 2 V
9 A
Yes
Yes
Yes
Channel wise, via LED, yellow
Channel wise, via LED, red
PROFINET V2.3, EtherNet/IP, Multiprotocol
10/100 Mbit/s
Via rotary coding switch, DCP
206 mm / 59.6 mm / 17.3 mm
520 g
IP67
-20 °C...70 °C
Zinc diecast / UL 94

**Note**

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# Engineering tables for PROFINET and Multiprotocol

IP67

B

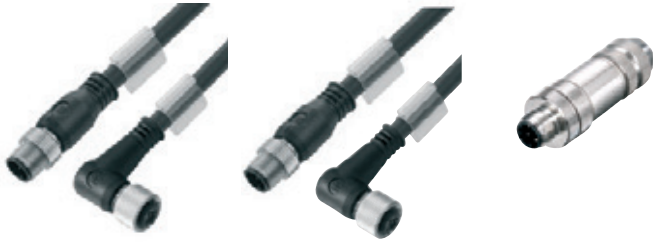
When planning the automation of a facility, you must have a wide variety of components available.

These engineering tables list all the components required for wiring up the u-remote PROFINET / EtherNet/IP based modules.

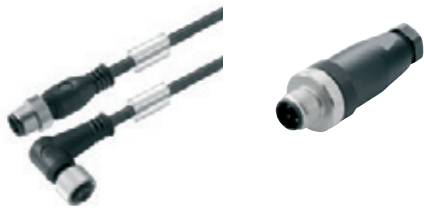
## PROFINET/ Multiprotocol modules



## PROFINET/ Multiprotocol accessories



## Accessories for I/O level



## Markers



## Protective caps



## Ordering data

Description	Type	Qty.	Order No.
<b>PROFINET and Multiprotocol modules</b>			
IO-Link, 4x Type A, 4x Type B	UR67-PN-HP-8IOL-12-30M	1	2426250000
IO-Link, 4x Type A, 4x Type B	UR67-PN-HP-8IOL-12-60M	1	2426260000
16 digital inputs	UR67-MP-HP-16DI-12-M60	1	2426270000
16 digital outputs	UR67-MP-HP-16DO-12-M60	1	2426280000
8 digital inputs and 8 digital outputs	UR67-MP-HP-8DI-12-60M	1	2426290000
8 digital inputs and 8 digital outputs	UR67-MP-78-8DI-12-60M	1	2426320000
16 digital inputs	UR67-MP-78-16DI-12-60M	1	2426300000
16 digital outputs	UR67-MP-78-16DO-12-60M	1	2426310000

## PROFINET/ EtherNet/IP accessories

PROFINET/ EtherNet/IP cables with female plug and male plug	*)
PROFINET/ EtherNet/IP cables with female plug and other side open	*)
PROFINET/ EtherNet/IP cables with male plug and other side open	*)

## Accessories for I/O level

Cable for I/O level	*)
M12 plug	*)

## Markers

Markers for 30 mm wide modules	MF 5/10 MC NE WS	250	1954050000
Markers for 60 mm wide modules	ESG 9/20 MC NE WS	200	1027290000

## Protective caps

M8 Dust cap (Sensor connections)	SAI-SK M8	50	1802760000
M12 Dust cap (Sensor connections)	SAI-SK	30	9456050000
M12 Dust cap (Bus-out and power-out)	SAI-SK-M12-UNI	20	2330260000
M12 Dust cap (Bus-in and power-in)	SAI-SK plug M12	50	1781520000

Note: \*) Can be found in our latest catalogue 8, signal and power transmission, order no. 2001350000



## u-remote IP67 PROFIBUS-DP modules

M12 or 7/8" power feed; 30 & 60 mm wide housing

IP67

B

PROFIBUS is with more than 43 million devices worldwide the most common fieldbus. In the manufacturing industry PROFIBUS-DP is used for communication between the controller and sensors or actuators in the field.

PROFIBUS allows simple and cost-saving topologies, bidirectional communication, extensive information and diagnostic features and a standardized integration the devices or device functions via device description files (GSD).





### Adapt flexibly to the installation situation

Modules with 30 mm or 60 mm width and three housing variations for a flexible and efficient installation space usage supports you in solving difficult installation situations.



### Suitable for application requirements

Whether particularly robust due to a zinc die-cast housing and fully potted modules or particularly easy for moving Applications- with Weidmüller PROFIBUS-DP IP67 modules give you the choice!



### Secure connection guaranteed

Using standardized voltage supply connections in 7/8" or M12 (A-coded) connection technique, with B-coded fieldbus connectors and M8 or M12 connectors in the I/O level, you are positioned safely in the world- not only regarding the degree of protection but also supply security!



### Channel-specific diagnostics

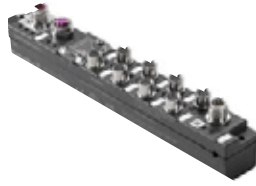
In case of maintenance work or if a fault occurs mostly every second counts- by a channel wise diagnosis based on LEDs and marking fields by each connection point you are ideally placed!

**PROFIBUS**

Remote I/O for digital signal processing



**UR67-PB-12-8DI-8-30K**



**UR67-PB-12-8DIO-8-30K**



**Ordering data**

Module variants
8 digital inputs 8 universal channels
<b>Note</b>

Type	Qty.	Order No.
UR67-PB-12-8DI-8-30K	1	2426360000
<b>Note</b>		

Type	Qty.	Order No.
UR67-PB-12-8DIO-8-30K	1	2426330000
<b>Note</b>		

Connections
Fieldbus (BUS-IN)
Fieldbus (BUS-OUT)
Supply voltage (AUX-IN)
I/O connections
Voltage supply
Operating voltage
Current consumption module electronic
Digital inputs
Input current, low
Input current, high
Input filter
Reverse polarity protection
Short-circuit protection
Status indicator
Diagnosis indication
Digital outputs
max. current-carrying capacity per output signal
Output voltage, low
Output voltage, high
Max. total current outputs
Reverse polarity protection
Short-circuit protection
Status indicator
Diagnosis indication
Fieldbus
Bus system
Transmission rate
Addressing
General data
L x W x H
Weight
Protection degree
Operating temperature
Housing main material / UL 94 flammability rating
Certificate

1x M12 plug 5-pole, B-coded
1x M12 female 5-pole, B-coded
1x M12 plug 5-pole
8 x M8 socket 3-pole
24 V ( (19 V DC ... 30 V DC))
typ. 65 mA
< 15 mA in accordance with EN 61131-2 Type 1
2 mA to 15 mA in accordance with EN 61131-2 Type 1
1 ms
Yes
Yes
Channel wise, yellow
Channel wise, via LED, red
Profibus-DP
Max. 12 Mbit/s (automatic detection)
Via rotary coding switch (1 - 126)
205.4 mm / 30 mm / 40.4 mm
200 g
IP67
-10 °C...60 °C
PBT / UL 94
CE, cULus

1x M12 plug 5-pole, B-coded
1x M12 female 5-pole, B-coded
1x M12 plug 5-pole
8 x M8 socket 3-pole
24 V ( (19 V DC ... 30 V DC))
typ. 65 mA
< 15 mA in accordance with EN 61131-2 Type 1
2 mA to 15 mA in accordance with EN 61131-2 Type 1
1 ms
Yes
Yes
Channel wise, yellow
Channel wise, via LED, red
0.5 A
min. (U <sub>L</sub> -1)
max. 2 V
4 A
Yes
Yes
Channel wise, yellow
Channel wise, via LED, red
Profibus-DP
Max. 12 Mbit/s (automatic detection)
Via rotary coding switch (1 - 126)
205.4 mm / 30 mm / 40.4 mm
200 g
IP67
-10 °C...60 °C
PBT / UL 94
CE, cULus

**Note**

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**PROFIBUS**  
Remote I/O for digital signal processing



**UR67-PB-78-16DI-12-60K**



**UR67-PB-78-16DIO-12-60K**



**Ordering data**

Module variants
16 digital inputs 16 universal channels
Note

Type	Qty.	Order No.
UR67-PB-78-16DI-12-60K	1	2426370000
Note		

Type	Qty.	Order No.
UR67-PB-78-16DIO-12-60K	1	2426340000
Note		

**Connections**

Fieldbus (BUS-IN)  
Fieldbus (BUS-OUT)  
Supply voltage (AUX-IN)  
Supply voltage (AUX-OUT)  
I/O connections

**Connections**

1x M12 plug 5-pole, B-coded  
1x M12 female 5-pole, B-coded  
1x 7/8" plug 5-pole  
1x 7/8" socket 5-pole  
8 x M12 socket 5-pole, A-coded

**Connections**

1x M12 plug 5-pole, B-coded  
1x M12 female 5-pole, B-coded  
1x 7/8" plug 5-pole  
1x 7/8" socket 5-pole  
8 x M12 socket 5-pole, A-coded

**Voltage supply**

Operating voltage  
Current consumption module electronic

**Voltage supply**

24 V ( (19 V DC ... 30 V DC))  
typ. 70 mA

**Voltage supply**

24 V ( (19 V DC ... 30 V DC))  
typ. 70 mA

**Digital inputs**

Input current, low  
Input current, high  
Input filter  
Reverse polarity protection  
Short-circuit protection  
Overload protection  
Status indicator  
Diagnosis indication

**Digital inputs**

< 15 mA in accordance with EN 61131-2 Type 1  
2 mA to 15 mA in accordance with EN 61131-2 Type 1  
1 ms  
Yes  
Yes  
Yes  
Channel wise, yellow  
Channel wise, via LED, red, green

**Digital inputs**

< 15 mA in accordance with EN 61131-2 Type 1  
2 mA to 15 mA in accordance with EN 61131-2 Type 1  
1 ms  
Yes  
Yes  
Yes  
Channel wise, yellow  
Channel wise, via LED, red, green

**Digital outputs**

max. current-carrying capacity per output signal  
Output voltage, low  
Output voltage, high  
Max. total current outputs  
Reverse polarity protection  
Short-circuit protection  
Overload protection  
Status indicator  
Diagnosis indication

**Digital outputs**

1.6 A  
max. 2 V  
min. (U<sub>0</sub> - 1V)  
9 A  
Yes  
Yes  
Yes  
Channel wise, yellow  
Channel wise, via LED, red, green

**Digital outputs**

1.6 A  
max. 2 V  
min. (U<sub>0</sub> - 1V)  
9 A  
Yes  
Yes  
Yes  
Channel wise, yellow  
Channel wise, via LED, red, green

**Fieldbus**

Bus system  
Transmission rate  
Addressing

**Fieldbus**

Profibus-DP  
Max. 12 Mbit/s (automatic detection)  
Via rotary coding switch (1 - 126)

**Fieldbus**

Profibus-DP  
Max. 12 Mbit/s (automatic detection)  
Via rotary coding switch (1 - 126)

**General data**

L x W x H  
Weight  
Protection degree  
Operating temperature  
Housing main material / UL 94 flammability rating  
Certificate

**General data**

243 mm / 60 mm / 39.5 mm  
380 g  
IP67  
-10 °C...60 °C  
PBT / UL 94  
CE, cULus

**General data**

243 mm / 60 mm / 39.5 mm  
380 g  
IP67  
-10 °C...60 °C  
PBT / UL 94  
CE, cULus

**Note**

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**PROFIBUS**

Remote I/O for digital signal processing



**UR67-PB-78-16DI-12-60M**



**UR67-PB-78-16DO-12-60M**



**Ordering data**

Module variants	
	16 digital inputs 16 digital outputs
Note	

Type	Qty.	Order No.
UR67-PB-78-16DI-12-60M	1	2426390000
Note		

Type	Qty.	Order No.
UR67-PB-78-16DO-12-60M	1	2426400000
Note		

Connections
Fieldbus (BUS-IN)
Fieldbus (BUS-OUT)
Supply voltage (AUX-IN)
Supply voltage (AUX-OUT)
I/O connections
Voltage supply
Operating voltage
Current consumption module electronic
Digital inputs
Input current, low
Input current, high
Input filter
Reverse polarity protection
Short-circuit protection
Overload protection
Status indicator
Diagnosis indication
Digital outputs
max. current-carrying capacity per output signal
Output voltage, low
Output voltage, high
Max. total current outputs
Reverse polarity protection
Short-circuit protection
Overload protection
Status indicator
Diagnosis indication
Fieldbus
Bus system
Transmission rate
Addressing
System integration
General data
L x W x H
Weight
Protection degree
Operating temperature
Housing main material / UL 94 flammability rating
Certificate

1x M12 plug 5-pole, B-coded
1x M12 female 5-pole, B-coded
1x 7/8" plug 5-pole
1x 7/8" socket 5-pole
8 x M12 socket 5-pole, A-coded
24 V ( (18 V DC ... 30 V DC))
typ. 60 mA
< 15 mA in accordance with EN 61131-2 Type 1
2 mA to 15 mA in accordance with EN 61131-2 Type 1
3 ms
Yes
Yes
Yes
Channel wise, yellow, white
Channel wise, via LED, red
Profibus-DP
Max. 12 Mbit/s (automatic detection)
Via rotary coding switch (1 - 126)
GSD file
264.7 mm / 59.6 mm / 31 mm
605 g
IP67
-10 °C...60 °C
Zinc diecast / UL 94
CE, cULus

1x M12 plug 5-pole, B-coded
1x M12 female 5-pole, B-coded
1x 7/8" plug 5-pole
1x 7/8" socket 5-pole
8 x M12 socket 5-pole, A-coded
24 V ( (18 V DC ... 30 V DC))
typ. 60 mA
1.6 A
max. 2 V
min. (U <sub>i</sub> - 1V)
9 A
Yes
Yes
Yes
Channel wise, yellow, white
Channel wise, via LED, red
Profibus-DP
Max. 12 Mbit/s (automatic detection)
Via rotary coding switch (1 - 126)
GSD file
264.7 mm / 59.6 mm / 31 mm
605 g
IP67
-10 °C...60 °C
Zinc diecast / UL 94
CE, cULus

Note

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Download of GSD-file on [www.weidmueller.com](http://www.weidmueller.com)

## PROFIBUS

## Remote I/O for digital signal processing



## UR67-PB-78-8DIDO-12-60M



## Ordering data

Module variants
8 digital inputs and 8 digital outputs
Note

Type	Qty.	Order No.
UR67-PB-78-8DIDO-12-60M	1	2426380000

Connections
Fieldbus (BUS-IN)
Fieldbus (BUS-OUT)
Supply voltage (AUX-IN)
Supply voltage (AUX-OUT)
I/O connections
Voltage supply
Operating voltage
Current consumption module electronic
Digital inputs
Input current, low
Input current, high
Input filter
Reverse polarity protection
Short-circuit protection
Overload protection
Status indicator
Diagnosis indication
Digital outputs
max. current-carrying capacity per output signal
Output voltage, low
Output voltage, high
Max. total current outputs
Reverse polarity protection
Short-circuit protection
Overload protection
Status indicator
Diagnosis indication
Fieldbus
Bus system
Transmission rate
Addressing
System integration
General data
L x W x H
Weight
Protection degree
Operating temperature
Housing main material / UL 94 flammability rating
Certificate

1x M12 plug 5-pole, B-coded
1x M12 female 5-pole, B-coded
1x 7/8" plug 5-pole
1x 7/8" socket 5-pole
8 x M12 socket 5-pole, A-coded
Voltage supply
24 V ( 18 V DC ... 30 V DC)
typ. 60 mA
Digital inputs
< 15 mA in accordance with EN 61131-2 Type 1
2 mA to 15 mA in accordance with EN 61131-2 Type 1
3 ms
Yes
Yes
Yes
Channel wise, yellow
Channel wise, via LED, red
Digital outputs
1.6 A
max. 2 V
min. (U <sub>i</sub> - 1V)
9 A
Yes
Yes
Yes
Channel wise, yellow
Channel wise, via LED, red
Fieldbus
Profibus-DP
Max. 12 Mbit/s (automatic detection)
Via rotary coding switch (1 - 126)
GSD file
General data
264.7 mm / 59.6 mm / 31 mm
605 g
IP67
-10 °C...60 °C
Zinc diecast / UL 94
CE, cULus

Note
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# Engineering tables for PROFIBUS-DP

IP67

When planning the automation of a facility, you must have a wide variety of components available.

These engineering tables list all the components required for wiring up the u-remote PROFIBUS modules.

B

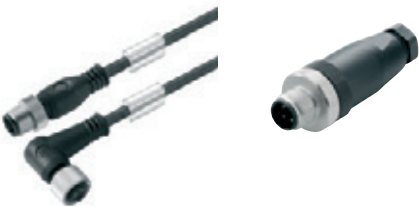
## PROFIBUS modules



## PROFIBUS accessories



## Accessories for I/O level



## Markers



## Protective caps



## Ordering data

Description	Type	Qty.	Order No.
<b>PROFIBUS modules</b>			
8 digital inputs	UR67-PB-12-8DI-8-30K	1	2426360000
8 universal channels	UR67-PB-12-8DIO-8-30K	1	2426330000
16 digital inputs	UR67-PB-78-16DI-12-60K	1	2426370000
16 universal channels	UR67-PB-78-16DIO-12-60K	1	2426340000
16 digital inputs	UR67-PB-78-16DI-12-60M	1	2426390000
16 digital outputs	UR67-PB-78-16DO-12-60M	1	2426400000
8 digital inputs and 8 digital outputs	UR67-PB-78-8DIDO-12-60M	1	2426380000

## PROFIBUS accessories

PROFIBUS cables with female plug and male plug	*)
PROFIBUS cables with female plug and other side open	*)
PROFIBUS cables with male plug and other side open	*)

## Accessories for I/O level

Cables for I/O level	*)
M12 plug	*)
M8 plug	*)

## Markers

Markers for 30 mm wide modules	ESG 5/10 MC NE WS	400	1919940000
Markers for 60 mm wide modules	ESG 9/20 MC NE WS	200	1609940000

## Protective caps

M8 Dust cap (Sensor connections)	SAI-SK M8	50	1802760000
M12 Dust cap (Sensor connections)	SAI-SK	30	9456050000
M12 Dust cap (Bus-out and power-out)	SAI-SK-M12-UNI	20	2330260000
M12 Dust cap (Bus-in and power-in)	SAI-SK plug M12	50	1781520000

Note: \*) Can be found in our latest catalogue 8, signal and power transmission, order no. 2001350000



# SAI Active Universal

IP67

## Compact, basic versions of the Remote I/O system with IP67 protection

**B** The SAI Active Universal consists of basic, compact designed variants that include a variety of modules for digital and analogue inputs and outputs. The housing has a sturdy construction in compliance with strict industrial requirements. It is resistant against aggressive materials, vibration, shock, temperature, water and dust.

The high quality connection system uses conventional, standardised M8 and M12 connectors with standards-compliant coding. They ensure a reliable wiring process with less risk of errors. Two M12 connections for the fieldbus allow for a continuous bus installation without any additional T-distributor. The functional earth connection is automatically created when installing on a metallic earthed base.





#### 4 independent voltage circuits

The modules can be supplied with up to four different voltage potentials. The module voltage can be simultaneously used for the inputs. In addition, up to three feed points are available for outputs; these can be switched off individually depending on the application requirements. Plug in cross connectors can be used to merge voltage potentials on the module.



#### Efficient diagnostics and status alerts

The status of the I/Os is shown directly on the module using arrow icons. The arrows point to the label and the plug in position. Up to seven status LEDs are available for displaying additional information about the power supply, fieldbus status and group diagnostics. The information is simultaneously transmitted to the controller unit via the bus system.

DeviceNet™

CANopen

#### Freedom of choice

Total compliance with many industrial fieldbus standards: this permits integration with all conventional controllers so that the modules can be used in practically all applications. SAI Active Universal supports CANopen and DeviceNet™ communication protocols.

M8  
Analogue  
Digital  
M12

#### A wide variety of variants

All SAI Active modules with digital inputs or digital outputs are optionally available with standard M8 or M12 connection systems. For modules in the 16DI/8DO series, the configuration can be customised to fit the application so that anywhere between 16DI to 8DI/8DO can be used. Output cables with up to 2 A per channel are used to connect almost any load. Analogue modules can be configured flexibly for the current of voltage outputs.

## CANopen

### Remote I/O for digital signal processing

IP67

B

#### Ordering data

Module variants
16 Digital In; 16 Digital In / 8 Digital Out
16 Digital In; 16 Digital In / 8 Digital Out

#### Note

#### Connections

Fieldbus (BUS-IN)  
Fieldbus (BUS-OUT)  
Supply voltage (AUX-IN)  
Supply voltage (AUX-OUT)  
I/O connections

#### Voltage supply

Operating voltage  
Contact load  
Max. total current module

#### Digital inputs

Permitted input voltage  
Input voltage, low  
Input voltage, high  
Input current, low  
Input current, high  
Input filter

#### Digital outputs

max. current-carrying capacity per output signal  
Switching frequency load (resistive / inductive / inrush)  
Short-circuit proof  
Output voltage, low  
Output voltage, high  
Max. total current of outputs

#### Fieldbus

Bus system  
Transmission rate  
Addressing  
System integration

#### General data

L x W x H  
Weight  
Protection degree  
Operating temperature  
Storage temperature  
Housing main material / UL 94 flammability rating  
Certificate

#### SAI-AU



Type	Qty.	Order No.
SAI-AU M8 CAN 16DI/8DO	1	1906690000
SAI-AU M12 CAN 16DI/8DO	1	1906660000

1x M12 plug 5-pole, A-coded  
1x M12 female 5-pole, A-coded  
2x M12 plug 5-pole, A-coded

16 x M8 socket 3-pole / 8 x M12 socket 5-pole, A-coded

24 V ( (18 V DC ... 30 V DC))

Per PIN max. 4 A

8 A

-30 V to +30 V (protected against polarity reversal)

<5 V in accordance with EN 61131-2 Type 1

>15 V in accordance with EN 61131-2 Type 1

< 15 mA in accordance with EN 61131-2 Type 1

2 mA to 15 mA in accordance with EN 61131-2 Type 1

3 ms

0.5 A, 2 A

max. 100 Hz / max. 1 Hz / max. 8 Hz

Yes, cut-off for short circuit and error message

0 V DC

Supply voltage less 0.7 V DC

7 A, 8 A

CANopen

Max. 1 Mbit/s (automatic detection)

Via rotary coding switch (1 - 127)

EDS file ( (Device-specific for each module))

210 mm / 54 mm / 32 mm

< 400 g

IP67

0 °C...60 °C

-25 °C...85 °C

Pocan, PBT / V-0

CE, cULus

#### SAI-AU



Type	Qty.	Order No.
SAI-AU M8 CAN 16DI	1	1906680000
SAI-AU M12 CAN 16DI	1	1906650000

1x M12 plug 5-pole, A-coded

1x M12 female 5-pole, A-coded

1x M12 plug 5-pole, A-coded

1x M12 female 5-pole, A-coded

16 x M8 socket 3-pole / 8 x M12 socket 5-pole, A-coded

24 V ( (18 V DC ... 30 V DC))

Per PIN max. 4 A

8 A

-30 V to +30 V (protected against polarity reversal)

<5 V in accordance with EN 61131-2 Type 1

>15 V in accordance with EN 61131-2 Type 1

< 15 mA in accordance with EN 61131-2 Type 1

2 mA to 15 mA in accordance with EN 61131-2 Type 1

3 ms

0.5 A, 2 A

max. 100 Hz / max. 1 Hz / max. 8 Hz

Yes, cut-off for short circuit and error message

0 V DC

Supply voltage less 0.7 V DC

7 A, 8 A

CANopen

Max. 1 Mbit/s (automatic detection)

Via rotary coding switch (1 - 127)

EDS file ( (Device-specific for each module))

210 mm / 54 mm / 32 mm

< 400 g

IP67

0 °C...60 °C

-25 °C...85 °C

Pocan, PBT / V-0

CE, cULus

#### Note

Download of EDS-file on [www.weidmueller.com](http://www.weidmueller.com)

Download of EDS-file on [www.weidmueller.com](http://www.weidmueller.com)

## CANopen

### Remote I/O for digital and analogue signal processing

## SAI-AU



### Ordering data

Module variants
4 Analogue In / 2 Analogue Out / 4 Digital In
Note

Type	Qty.	Order No.
SAI-AU M12 CAN AI/AO/DI	1	1906670000

Connections
Fieldbus (BUS-IN)
Fieldbus (BUS-OUT)
Supply voltage (AUX-IN)
Supply voltage (AUX-OUT)
I/O connections
Voltage supply
Operating voltage
Contact load
Max. total current module
Digital inputs
Permitted input voltage
Input voltage, low
Input voltage, high
Input current, low
Input current, high
Input filter
Digital outputs
max. current-carrying capacity per output signal
Switching frequency load (resistive / inductive / inrush)
Short-circuit proof
Output voltage, low
Output voltage, high
Max. total current of outputs
Fieldbus
Bus system
Transmission rate
Addressing
System integration
General data
L x W x H
Weight
Protection degree
Operating temperature
Storage temperature
Housing main material / UL 94 flammability rating
Certificate

1x M12 plug 5-pole, A-coded
1x M12 female 5-pole, A-coded
1x M12 plug 5-pole, A-coded
1x M12 female 5-pole, A-coded
24 V ( 18 V DC ... 30 V DC)
Per PIN max. 4 A
8 A
-30 V to +30 V (protected against polarity reversal)
<5 V in accordance with EN 61131-2 Type 1
>15 V in accordance with EN 61131-2 Type 1
< 15 mA in accordance with EN 61131-2 Type 1
2 mA to 15 mA in accordance with EN 61131-2 Type 1
3 ms
CANopen
Max. 1 Mbit/s (automatic detection)
Via rotary coding switch (1 - 127)
EDS file ( (Device-specific for each module))
210 mm / 54 mm / 32 mm
< 400 g
IP67
0 °C...60 °C
-25 °C...85 °C
Pocan, PBT / V-0
CE, cULus

Note

Download of EDS-file on [www.weidmueller.com](http://www.weidmueller.com)



# Engineering tables for CANopen



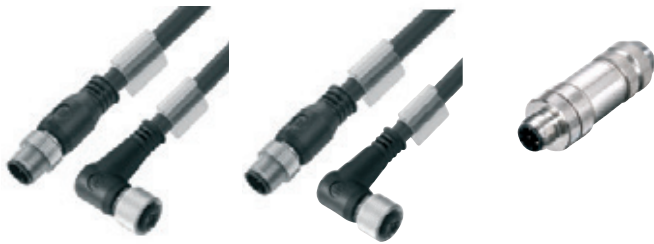
When planning the automation of a facility, you must have a wide variety of components available.

These engineering tables list all the components required for wiring up the SAI Active modules.

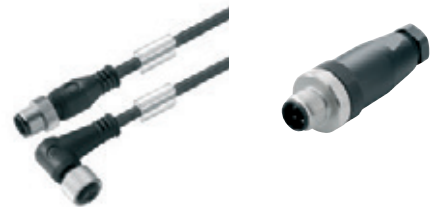
## CANopen modules



## CANopen accessories



## Sensor/actuator accessories



## Markers



## Protective caps



## Ordering data

Description	Type	Qty.	Order No.
<b>CANopen modules</b>			
16 digital inputs	SAI-AU M12 CAN 16DI	1	1906650000
8 digital inputs and 8 universal channels	SAI AU M12 CAN 16DI/8DO	1	1906660000
4 analogue inputs, 2 analogue outputs, 4 digital inputs	SAI-AU M12 CAN AI/AO/DI	1	1906670000
16 digital inputs	SAI-AU M8 CAN 16DI	1	1906680000
8 digital inputs and 8 universal channels	SAI-AU M8 CAN 16DI/8DO	1	1906690000
<b>CANopen accessories</b>			
CANopen cables with female plug and male plug			*)
CANopen cables with female plug and other side open			*)
CANopen cables with male plug and other side open			*)
CANopen plug-in connector			*)
CANopen terminating resistor	SAIEND CAN-M12 5P A-COD	1	1784760000
<b>Sensor/actuator accessories</b>			
Sensor-actuator cables			*)
Sensor-actuator plugs			*)
<b>Markers</b>			
Semi-transparent markers for PrintJet printing	ESG 8/13.5/43.3 SAI AU	5	1912130000
<b>Protective caps</b>			
M8 Dust cap (Sensor connections)	SAI-SK M8	50	1802760000
M12 Dust cap (Sensor connections)	SAI-SK	30	9456050000
M12 Dust cap (Bus-out and power-out)	SAI-SK-M12-UNI	20	2330260000
M12 Dust cap (Bus-in and power-in)	SAI-SK plug M12	50	1781520000

Note: \*) Can be found in our latest catalogue 8, signal and power transmission, order no. 2001350000



## DeviceNet™ Remote I/O for digital signal processing

# DeviceNet™

IP67

B

### Ordering data

Module variants	
	16 Digital In; 16 Digital In / 8 Digital Out
	16 Digital In; 16 Digital In / 8 Digital Out
Note	

### Connections

Fieldbus (BUS-IN)  
Fieldbus (BUS-OUT)  
Supply voltage (AUX-IN)  
Supply voltage (AUX-OUT)  
I/O connections

### Voltage supply

Operating voltage  
Contact load  
Max. total current module

### Digital inputs

Permitted input voltage  
Input voltage, low  
Input voltage, high  
Input current, low  
Input current, high  
Input filter

### Digital outputs

max. current-carrying capacity per output signal  
Switching frequency load (resistive / inductive / inrush)  
Short-circuit proof  
Output voltage, low  
Output voltage, high  
Max. total current of outputs

### Fieldbus

Bus system  
Transmission rate  
Addressing  
System integration

### General data

L x W x H  
Weight  
Protection degree  
Operating temperature  
Storage temperature  
Housing main material / UL 94 flammability rating  
Certificate

### SAI-AU



Type	Qty.	Order No.
SAI-AU M8 DN 16DI	1	1906730000
SAI-AU M12 DN 16DI	1	1906700000
Note		

1x M12 plug 5-pole, A-coded  
1x M12 female 5-pole, A-coded  
1x M12 plug 5-pole, A-coded  
1x M12 female 5-pole, A-coded  
16 x M8 socket 3-pole / 8 x M12 socket 5-pole, A-coded

24 V ( (18 V DC ... 30 V DC))

Per PIN max. 4 A

8 A

-30 V to +30 V (protected against polarity reversal)  
<5 V in accordance with EN 61131-2 Type 1  
>15 V in accordance with EN 61131-2 Type 1  
< 15 mA in accordance with EN 61131-2 Type 1  
2 mA to 15 mA in accordance with EN 61131-2 Type 1  
3 ms

DeviceNet  
Max. 500 kBit/s (automatic detection)  
Via rotary coding switch (0 - 63)  
EDS file ( (Device-specific for each module))

210 mm / 54 mm / 32 mm

< 400 g

IP67

0 °C...60 °C

-25 °C...85 °C

Pocan, PBT / V-0

CE, cULus

### SAI-AU



Type	Qty.	Order No.
SAI-AU M8 DN 16DI/8DO	1	1906740000
SAI-AU M12 DN 16DI/8DO	1	1906710000
Note		

1x M12 plug 5-pole, A-coded  
1x M12 female 5-pole, A-coded  
2x M12 plug 5-pole, A-coded

16 x M8 socket 3-pole / 8 x M12 socket 5-pole, A-coded

24 V ( (18 V DC ... 30 V DC))

Per PIN max. 4 A

8 A

-30 V to +30 V (protected against polarity reversal)  
<5 V in accordance with EN 61131-2 Type 1  
>15 V in accordance with EN 61131-2 Type 1  
< 15 mA in accordance with EN 61131-2 Type 1  
2 mA to 15 mA in accordance with EN 61131-2 Type 1  
3 ms

0.5 A, 2 A  
max. 100 Hz / max. 1 Hz / max. 8 Hz  
Yes, cut-off for short circuit and error message  
0 V DC  
Supply voltage less 0.7 V DC  
7 A, 8 A

DeviceNet  
Max. 500 kBit/s (automatic detection)  
Via rotary coding switch (0 - 63)  
EDS file ( (Device-specific for each module))

210 mm / 54 mm / 32 mm

< 400 g

IP67

0 °C...60 °C

-25 °C...85 °C

Pocan, PBT / V-0

CE, cULus

Note

**DeviceNet™**  
Remote I/O for digital and  
analogue signal processing

**DeviceNet™**

**SAI-AU**



**Ordering data**

Module variants
4 Analogue In / 2 Analogue Out / 4 Digital In
Note

Type	Qty.	Order No.
SAI-AU M12 DN AI/AO/DI	1	1906720000

Connections
Fieldbus (BUS-IN)
Fieldbus (BUS-OUT)
Supply voltage (AUX-IN)
Supply voltage (AUX-OUT)
I/O connections
Voltage supply
Operating voltage
Contact load
Max. total current module
Digital inputs
Permitted input voltage
Input voltage, low
Input voltage, high
Input current, low
Input current, high
Input filter
Analogue inputs
Measurement range [analogue input]
Maximum input voltage in relation to GND
Input resistance (load)
Max. input current (differential)
Short-circuit proof [analogue input]
Resolution [analogue input] / Precision [analogue input]
Analogue outputs
Measurement range [analogue output]
Output interval
Short-circuit proof [analogue output]
Resolution [analogue output] / Precision [analogue output]
Fieldbus
Bus system
Transmission rate
Addressing
System integration
General data
L x W x H
Weight
Protection degree
Operating temperature
Storage temperature
Housing main material / UL 94 flammability rating
Certificate

1x M12 plug 5-pole, A-coded
1x M12 female 5-pole, A-coded
1x M12 plug 5-pole, A-coded
1x M12 female 5-pole, A-coded
8 x M12 socket 5-pole, A-coded
24 V ( 18 V DC ... 30 V DC)
Per PIN max. 4 A
8 A
-30 V to +30 V (protected against polarity reversal)
<5 V in accordance with EN 61131-2 Type 1
>15 V in accordance with EN 61131-2 Type 1
< 15 mA in accordance with EN 61131-2 Type 1
2 mA to 15 mA in accordance with EN 61131-2 Type 1
3 ms
-10 V ... +10 V, 0 V ... 10V, 0 ... 20 mA, 4...20 mA
35 V
<125 Ohm
-50 mA to +50 mA (protected against polarity reversal)
Yes
12-bit / < 0.2 %
-10 V ... +10 V, 0 V ... 10V, 0 ... 20 mA, 4...20 mA
5 ms to 250 ms (can be configured)
Yes
12-bit / < 0.2 %
DeviceNet
Max. 500 kBit/s (automatic detection)
Via rotary coding switch (0 - 63)
EDS file ( (Device-specific for each module))
210 mm / 54 mm / 32 mm
< 400 g
IP67
0 °C...60 °C
-25 °C...85 °C
Pocan, PBT / V-0
CE, cULus

Note
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# Engineering tables for DeviceNet™

IP67

B

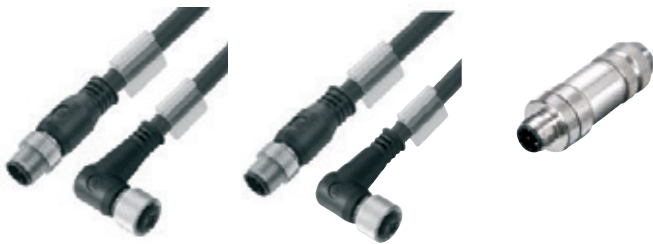
When planning the automation of a facility, you must have a wide variety of components available.

These engineering tables list all the components required for wiring up the SAI Active modules.

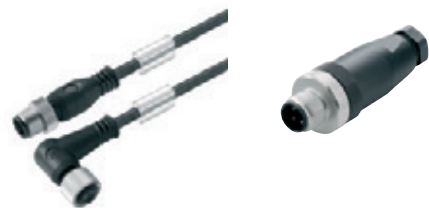
## DeviceNet™ modules



## DeviceNet™ accessories



## Sensor/actuator accessories



## Markers



## Protective caps



## Ordering data

Description	Type	Qty.	Order No.
<b>DeviceNet™ modules</b>			
16 digital inputs	SAI-AU M12 DN 16DI	1	1906700000
8 digital inputs and 8 universal channels	SAI-AU M12 DN 16DI/8DO	1	1906710000
4 analogue inputs, 2 analogue outputs, 4 digital inputs	SAI-AU M12 DN AI/AO/DI	1	1906720000
16 digital inputs	SAI-AU M8 DN 16DI	1	1906730000
8 digital inputs and 8 universal channels	SAI-AU M8 DN 16DI/8DO	1	1906740000

## DeviceNet™ accessories

DeviceNet™ cables with female plug and male plug	*)
DeviceNet™ cables with female plug and other side open	*)
DeviceNet™ cables with male plug and other side open	*)

DeviceNet™ plug-in connector	*)
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DeviceNet™ terminating resistor	SAIEND CAN-M12 5P A-COD	1	1784760000
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## Sensor/actuator accessories

Sensor-actuator cables	*)
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Sensor-actuator plugs	*)
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## Markers

Semi-transparent markers for PrintJet printing	ESG 8/13.5/43.3 SAI AU	5	1912130000
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## Protective caps

M8 Dust cap (Sensor connections)	SAI-SK M8	50	1802760000
M12 Dust cap (Sensor connections)	SAI-SK	30	9456050000
M12 Dust cap (Bus-out and power-out)	SAI-SK-M12-UNI	20	2330260000
M12 Dust cap (Bus-in and power-in)	SAI-SK plug M12	50	1781520000

Note: \*) Can be found in our latest catalogue 8, signal and power transmission, order no. 2001350000



## SAI Active Universal Pro

IP67

### Professional versions of the Remote I/O System featuring IP67 protection

**B** The modules in the SAI Active Universal Pro systems provide additional I/O and functional modules for more versatile topologies. The extension modules come in a compact, space-saving design. They can also be mounted on the side because of the additional drilled holes in the side of the housing. Up to 15 extension modules can be connected over a distance of 50 metres using a shielded, standard M8 sensor cable and the SAI fieldbus module.

In addition to the digital input and output modules, we also offer counter unit modules, thermal modules, RTD modules and analogue modules. The digital input and output modules are also available in M8 and M12 variants. The analogue modules and functional modules are available with M12 connections. Markers are included with every SAI Active module for labelling the I/O channels and the entire device. These markers can be printed on using the PrintJet system from Weidmüller.





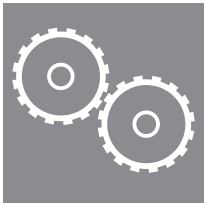
### **Cost-effective Subbus system**

Subbus modules are wired up using conventional, shielded, standard M8 sensor cables. Thus there is no need for expensive custom cables. The extension modules enable versatile expansion and minimise the costs associated with the fieldbus interface. The modules do not, however, detract from the performance of the fieldbus system.



### **Simplified installation**

The modules have a compact, space-saving design with additional holes drilled on the side of the housing: this allows them to be installed in a quick and versatile manner. All SAI Active modules with digital inputs or digital outputs are optionally available with standard M8 or M12 connection systems. The outputs are short-circuit-proof and protected against polarity reversal.



### **Efficient engineering**

All Pro-System modules are described in the standardised fieldbus specific device description files. They can be integrated into any controller unit and corresponding engineering system regardless of the particular manufacturer. The configuration (whether for the input, DESINA input, or output) is carried out without any additional software. Any user can configure directly from the engineering system.



Gateway modules with digital inputs



SAI-AU GW



UR20-1COM-SAI-PRO



Ordering data

Module variants	
	16 Digital In
Note	

Type	Qty.	Order No.
SAI-AU M12 DN GW 16DI	1	1938570000

Type	Qty.	Order No.
UR20-1COM-SAI-PRO	1	2007430000
Note: Technical data for this product can be found in Chapter A		

Connections
Fieldbus (BUS-IN)
Fieldbus (BUS-OUT)
Supply voltage (AUX-IN)
Connection to Subbus (SUB-OUT)
I/O connections
Voltage supply
Operating voltage
Contact load
Max. total current module
Digital inputs
Permitted input voltage
Input voltage, low
Input voltage, high
Input current, low
Input current, high
Input filter
Fieldbus
Bus system
Transmission rate
Addressing
System integration
General data
L x W x H
Weight
Protection degree
Operating temperature
Storage temperature
Housing main material / UL 94 flammability rating
Certificate

1x M12 plug 5-pole, A-coded
1x M12 female 5-pole, A-coded
1x M12 plug 5-pole, A-coded
1 x M8 female 4-pole, A-coded
8 x M12 socket 5-pole, A-coded
24 V ( 18 V DC ... 30 V DC)
Per PIN max. 4 A
8 A
-30 V to +30 V (protected against polarity reversal)
<5 V in accordance with EN 61131-2 Type 1
>15 V in accordance with EN 61131-2 Type 1
< 15 mA in accordance with EN 61131-2 Type 1
2 mA to 15 mA in accordance with EN 61131-2 Type 1
1 ms, 3 ms, 5 ms, 10 ms, configurable
DeviceNet
Max. 500 kBit/s (automatic detection)
Via rotary coding switch (0 - 63)
EDS file
210 mm / 54 mm / 32 mm
< 350 g
IP67
0 °C...60 °C
-25 °C...85 °C
Pocan, PBT / V-0
CE, cULus

Note

# Engineering table for DeviceNet™

When planning the automation of a facility, you must have a wide variety of components available.

These engineering tables list all the components required for wiring up the SAI Active modules.

## DeviceNet™ modules



## DeviceNet™ accessories



## Subbus cables / terminating resistor



## Sensor/actuator accessories



## Markers



## Protective caps



## Ordering data

Description	Type	Qty.	Order No.
<b>DeviceNet™ modules</b>			
DeviceNet™ Gateway, 16 digital inputs	SAI-AU M12 DN GW 16DI	1	1938570000
Subbus module, 8 digital inputs	SAI-AU M12 SB 8DI	1	1938610000
Subbus module, 8 universal channels	SAI-AU M12 SB 8 DIO	1	1938640000
Subbus module, 8 digital inputs	SAI-AU M8 SB 8DI	1	1938600000
Subbus module, 8 universal channels	SAI-AU M8 SB 8 DIO	1	1938630000
Subbus module, 4 analogue inputs	SAI-AU M12 SB 4AI	1	1938690000
Subbus module, 4 analogue outputs	SAI-AU M12 SB 4AO	1	1938700000
Subbus module, 4 analogue PT100 inputs	SAI-AU M12 SB 4PT100	1	1938710000
Subbus modules, 4 analogue Thermo inputs	SAI-AU M12 SB 4Thermo	1	1938720000
Subbus module, 2 counter inputs	SAI-AU M12 SB 2Counter	1	1938730000
Subbus modules, 8 digital 2 A outputs	SAI-AU M8 SB 8DO 2A	1	1938660000
Subbus modules, 8 digital 2 A outputs	SAI-AU M12 SB 8DO 2A	1	1938680000

## DeviceNet™ accessories

DeviceNet™ cables with female plug and male plug			*)
DeviceNet™ cables with female plug and other side open			*)
DeviceNet™ cables with male plug and other side open			*)
DeviceNet™ plug-in connector			*)
DeviceNet™ terminating resistor	SAIEND CAN-M12 5P A-COD	1	1784760000

## Subbus cables / terminating resistor

Subbus cables			*)
Subbus terminating resistor	SAIEND CAN M8 4P	1	1955340000

## Sensor/actuator accessories

Sensor-actuator cables			*)
Sensor-actuator plugs			*)

## Markers

Semi-transparent markers for PrintJet printing	ESG 8/13.5/43.3 SAI AU	5	1912130000
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## Protective caps

M8 Dust cap (Sensor connections)	SAI-SK M8	50	1802760000
M12 Dust cap (Sensor connections)	SAI-SK	30	9456050000
M12 Dust cap (Bus-out and power-out)	SAI-SK-M12-UNI	20	2330260000
M12 Dust cap (Bus-in and power-in)	SAI-SK plug M12	50	1781520000

Note: \*) Can be found in our latest catalogue 8, signal and power transmission, order no. 2001350000

Subbus modules with digital inputs/outputs

IP67

B

SAI-AU Digital



SAI-AU Digital



Ordering data

Module variants	
8 Digital In; 8 Digital In / 8 Digital Out	
8 Digital In; 8 Digital In / 8 Digital Out	
8 Digital Out 2A	
8 Digital Out 2A	

Note

Type	Qty.	Order No.
SAI-AU M8 SB 8DI	1	1938600000
SAI-AU M12 SB 8DI	1	1938610000

Type	Qty.	Order No.
SAI-AU M8 SB 8DIO	1	1938630000
SAI-AU M12 SB 8DIO	1	1938640000
SAI-AU M8 SB 8DO 2A	1	1938660000
SAI-AU M12 SB 8DO 2A	1	1938680000

Connections

Supply voltage (AUX-IN)  
 Connection to Subbus (SUB-IN)  
 Connection to Subbus (SUB-OUT)  
 I/O connections

Voltage supply

Operating voltage  
 Contact load  
 Max. total current module

Digital inputs

Permitted input voltage  
 Input voltage, low  
 Input voltage, high  
 Input current, low  
 Input current, high  
 Input filter  
 Separation of potentials to module electronics [digital inputs]

Digital outputs

max. current-carrying capacity per output signal  
 Separation of potentials to module electronics [digital outputs]  
 Switching frequency, resistive load  
 Switching frequency, inductive load  
 Switching frequency, lamp load  
 Short-circuit proof  
 Output voltage, low  
 Output voltage, high  
 Max. total current outputs

Fieldbus

Bus system  
 Addressing  
 System integration

General data

L x W x H  
 Weight  
 Protection degree  
 Operating temperature  
 Storage temperature  
 Housing main material / UL 94 flammability rating  
 Certificate

Connections

1 x M8 plug 4-pole, A-coded  
 1 x M8 female 4-pole, A-coded  
 8 x M8 socket 3-pole

Voltage supply

24 V ( (18 V DC ... 30 V DC))

Digital inputs

-30 V to +30 V (protected against polarity reversal)  
 <5 V in accordance with EN 61131-2 Type 1  
 >15 V in accordance with EN 61131-2 Type 1  
 < 15 mA in accordance with EN 61131-2 Type 1  
 2 mA to 15 mA in accordance with EN 61131-2 Type 1  
 1 ms, 3 ms, 5 ms, 10 ms, configurable  
 none

Digital outputs

0.5 A  
 none  
 max. 100 Hz  
 max. 1 Hz  
 max. 8 Hz  
 Yes, cut-off for short circuit and error message  
 0 V DC  
 Supply voltage less 0.7 V DC  
 4 A

Fieldbus

Subbus  
 automatic  
 automatic

General data

155 mm / 30 mm / 32 mm  
 < 200 g  
 IP67  
 0 °C...60 °C  
 -25 °C...85 °C  
 Pocan, PBT / 5VA  
 CE, cULus

Connections

1x M12 plug 5-pole, A-coded  
 1 x M8 plug 4-pole, A-coded  
 1 x M8 female 4-pole, A-coded  
 8 x M8 socket 3-pole

Voltage supply

24 V ( (18 V DC ... 30 V DC))  
 Per PIN max. 4 A  
 8 A

Digital inputs

-30 V to +30 V (protected against polarity reversal)  
 <5 V in accordance with EN 61131-2 Type 1  
 >15 V in accordance with EN 61131-2 Type 1  
 < 15 mA in accordance with EN 61131-2 Type 1  
 2 mA to 15 mA in accordance with EN 61131-2 Type 1  
 1 ms, 3 ms, 5 ms, 10 ms, configurable  
 none

Digital outputs

0.5 A  
 none  
 max. 100 Hz  
 max. 1 Hz  
 max. 8 Hz  
 Yes, cut-off for short circuit and error message  
 0 V DC  
 Supply voltage less 0.7 V DC  
 4 A

Fieldbus

Subbus  
 automatic  
 automatic

General data

180 mm / 30 mm / 32 mm  
 < 200 g  
 IP67  
 0 °C...60 °C  
 -25 °C...85 °C  
 Pocan, PBT / 5VA  
 CE, cULus

Note

Note

Note

## Subbus modules with analogue inputs/outputs

### SAI-AU analogue



### SAI-AU Analog



#### Ordering data

Module variants
4 Analogue Out / 4 Analogue In
Note

Type	Qty.	Order No.
SAI-AU M12 SB 4A0	1	1938700000
Note		

Type	Qty.	Order No.
SAI-AU M12 SB 4AI	1	1938690000
Note		

Connections
Connection to Subbus (SUB-IN)
Connection to Subbus (SUB-OUT)
I/O connections
Voltage supply
Operating voltage
Analogue inputs
Measurement range [analogue input]
Maximum input voltage in relation to GND
Input resistance (load)
Max. input current (differential)
Short-circuit proof [analogue input]
Resolution [analogue input] / Precision [analogue input]
Analogue outputs
Measurement range [analogue output]
Output interval
Short-circuit proof [analogue output]
Resolution [analogue output] / Precision [analogue output]
Fieldbus
Bus system
Addressing
System integration
General data
L x W x H
Weight
Protection degree
Operating temperature
Storage temperature
Housing main material / UL 94 flammability rating
Certificate

1 x M8 plug 4-pole, A-coded
1 x M8 female 4-pole, A-coded
4 x M12 female, 5-pole A-coded
24 V ( (18 V DC ... 30 V DC))
-10 V ... +10 V, 0 V ... 10V, 0 ... 20 mA, 4...20 mA
5 ms to 250 ms (can be configured)
Yes
12-bit / < 0.2 %
Subbus
automatic
automatic
155 mm / 30 mm / 32 mm
< 200 g
IP67
0 °C...60 °C
-25 °C...85 °C
Pocan, PBT / 5VA
CE, cULus

1 x M8 plug 4-pole, A-coded
1 x M8 female 4-pole, A-coded
4 x M12 female, 5-pole A-coded
24 V ( (18 V DC ... 30 V DC))
-10 V ... +10 V, 0 V ... 10V, 0 ... 20 mA, 4...20 mA
35 V
<125 Ohm
-50 mA to +50 mA (protected against polarity reversal)
Yes
12-bit / < 0.2 %
Subbus
automatic
automatic
155 mm / 30 mm / 32 mm
< 200 g
IP67
0 °C...60 °C
-25 °C...85 °C
Pocan, PBT / 5VA
CE, cULus

Note
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Note
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Note
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## Subbus modules with functional inputs

## SAI-AU Counter



## Ordering data

Module variants
2 counter inputs / 2 gate outputs
Note

Type	Qty.	Order No.
SAI-AU M12 SB 2Counter	1	1938730000

Connections
Supply voltage (AUX-IN)
Connection to Subbus (SUB-IN)
Connection to Subbus (SUB-OUT)
I/O connections
Voltage supply
Operating voltage
Contact load
Max. total current module
Functional inputs
Counting breadth
Switching frequency
Number of inputs
Fieldbus
Bus system
Addressing
System integration
General data
L x W x H
Weight
Protection degree
Operating temperature
Storage temperature
Housing main material / UL 94 flammability rating
Certificate

1 x M12 plug 5-pole, A-coded
1 x M8 plug 4-pole, A-coded
1 x M8 female 4-pole, A-coded
4 x M12 female, 5-pole A-coded
24 V ( ( 18 V DC ... 30 V DC))
Per PIN max. 4 A
8 A
32 Bit
100 kHz
2 x enables, 2 x counters, 2 x count directions
Subbus
automatic
automatic
180 mm / 30 mm / 32 mm
< 200 g
IP67
0 °C...60 °C
-25 °C...85 °C
Pocan, PBT / 5VA
CE, cULus

Note
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Note
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## Subbus modules with functional inputs

## SAI-AU Thermo



## Ordering data

<b>Module variants</b>	4 thermal inputs
<b>Note</b>	

Type	Qty.	Order No.
SAI-AU M12 SB 4Thermo	1	1938720000

<b>Connections</b>	
Connection to Subbus (SUB-IN)	
Connection to Subbus (SUB-OUT)	
I/O connections	
<b>Voltage supply</b>	
Operating voltage	
<b>Functional inputs</b>	
Sensor	
Temperature range	
Resolution	
Conversion time	
Measurement error	
Input filter	
cold junction compensation	
<b>Fieldbus</b>	
Bus system	
Addressing	
System integration	
<b>General data</b>	
L x W x H	
Weight	
Protection degree	
Operating temperature	
Storage temperature	
Housing main material / UL 94 flammability rating	
Certificate	

1 x M8 plug 4-pole, A-coded
1 x M8 female 4-pole, A-coded
4 x M12 female, 5-pole A-coded
24 V ( 18 V DC ... 30 V DC)
Types J, K, L, B, E, N, R, S, T, U: mV readings
Typical for sensor, Preset Type K, -100 °C to 1370 °C
0.1 °C per digit
250 ms (can be configured to 70 ms)
< ± 0.5% (of measuring range limit)
configurable
External PT1000 connection on pins 1 and 3 (GND)
Subbus
automatic
automatic
155 mm / 30 mm 32 mm
< 200 g
IP67
0 °C...60 °C
-25 °C...85 °C
Pocan, PBT / 5VA
CE, cULus

<b>Note</b>	
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## Subbus modules with functional inputs

## SAI-AU PT100



## Ordering data

Module variants
4 PT100 inputs
Note

Type	Qty.	Order No.
SAI-AU M12 SB 4PT100	1	1938710000

Connections
Connection to Subbus (SUB-IN)
Connection to Subbus (SUB-OUT)
I/O connections
Voltage supply
Operating voltage
Functional inputs
Sensor
Resolution
Conversion time
Measurement error
Input filter
Measurement range for PT sensors
Measurement range for Ni sensors
Resistance measurement
Potentiometer
Measurement current
Fieldbus
Bus system
Addressing
System integration
General data
L x W x H
Weight
Protection degree
Operating temperature
Storage temperature
Housing main material / UL 94 flammability rating
Certificate

1 x M8 plug 4-pole, A-coded
1 x M8 female 4-pole, A-coded
4 x M12 female, 5-pole A-coded
24 V ( (18 V DC ... 30 V DC))
N100, N1000, N120, PT100, PT1000, PT200, PT300, PT500, Potentiometer connection, Resistance measurement
0.1 °C per digit
250 ms (can be configured to 65 ms)
< ± 1 °C
configurable
-200 °C ... + 850 °C
-60 °C ... +250 °C
max. 4000 Ohm
100 to 4000 Ω (three-wire connection)
Typically 0.5 mA
Subbus
automatic
automatic
155 mm / 30 mm / 32 mm
< 200 g
IP67
0 °C...60 °C
-25 °C...85 °C
Pocan, PBT / 5VA
CE, cULus

Note
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Note
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# Sensor Cables u-remote

Weidmüller is also offering the required sensor and actuator cables as a supplement to the new, innovative u-remote system. Generally, there are two different courses of action for cabling.

- Circular plug cables assembled on one end
- Cables assembled on both ends with u-remote plug-in connectors already connected

To make things easier to understand, only the M8 and M12 cables have been shown in this diagram. Actuator cables can also be found in catalogue 8.

The PUR cable used here is black, halogen-free and suitable for dragline cable carriers. The PVC cable is suitable for dragline cable carriers. Further technical details are available in catalogue 8.

The minimum order quantity for each type of cable is 1 unit. This means that sample parts and the demand for replacement parts are also easy to manage.

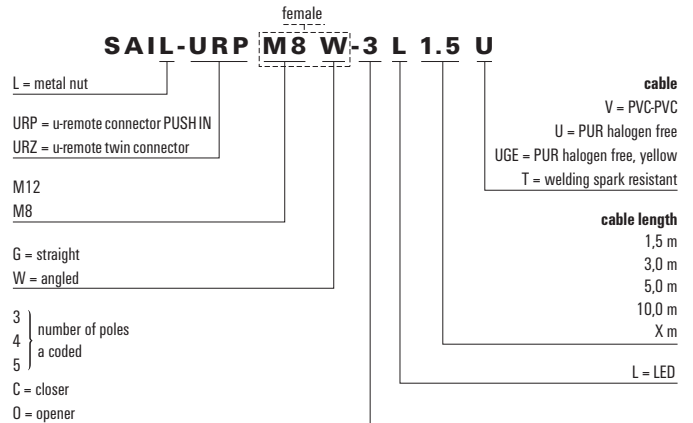
## Standard cable lengths

The cable lengths listed under order data are all 1.5 m. To order any other standard cable lengths, simply change the last four numbers in the order number. Additional lengths can be supplied at the request of the customer.

### Order data

Type	Length	Order No.
	1.5 m	xxxxxx0150
	3.0 m	xxxxxx0300
	5.0 m	xxxxxx0500
	10.0 m	xxxxxx1000

## Description code example



Connecting cables

u-remote plug / M12  
u-remote plug / M8

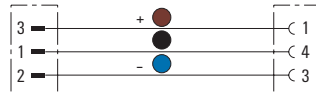
Halogen-free PUR



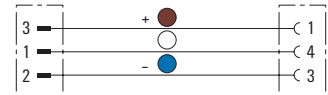
PVC



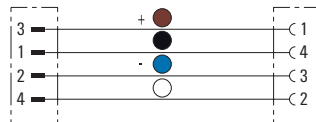
3-pin / NO contact



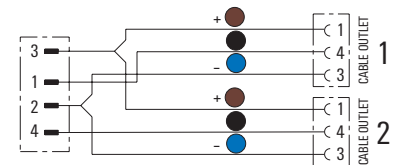
NC contact



4-pin



Twin / NO contact



Technical data

Rated current
Rated voltage
Temperature range of housing
Core cross-section
Protection degree
Contact surface
Sheath material
Insulation
<b>Note</b>

4 A
M12: 250 V / M8: 60 V (3-pole) / LED: 24 V
-25...+85 °C
M12: 0.34 mm <sup>2</sup> / M8: 0.25 mm <sup>2</sup>
IP67/68 (M12/M8 head)
Gold-plated
PUR
TPM

4 A
M12: 250 V / M8: 60 V (3-pole) / LED: 24 V
-25...+85 °C
M12: 0.34 mm <sup>2</sup> / M8: 0.25 mm <sup>2</sup>
IP67/68 (M12/M8 head)
Gold-plated
PVC
PVC

Ordering data

Module variants
NO contact / u-remote plug - M12 straight socket
NO contact / u-remote plug - M12 angled socket
NC contact / u-remote plug - M12 straight socket
NC contact / u-remote plug - M12 angled socket
4-pole / u-remote plug - M12 straight socket
4-pole / u-remote plug - M12 angled socket
3-pole / u-remote plug - M8 straight socket
3-pole / u-remote plug - M8 angled socket
4-pole / u-remote plug - M12 angled socket - LED
3-pole / u-remote plug - M8 angled socket - LED
Twin / NO contact / u-remote plug - M12 straight socket
Twin / NO contact / u-remote plug - M12 angled socket
Twin / 3-pole / u-remote plug - M8 straight socket
Twin / 3-pole / u-remote plug - M8 angled socket
<b>Note</b>

Type	Qty.	Order No.
SAIL-URPM12G-C-1.5U	1	1475070150
SAIL-URPM12W-C-1.5U	1	1475080150
SAIL-URPM12G-O-1.5U	1	1475090150
SAIL-URPM12W-O-1.5U	1	1475120150
SAIL-URPM12G-4-1.5U	1	1475130150
SAIL-URPM12W-4-1.5U	1	1475140150
SAIL-URPM8G-3-1.5U	1	1475160150
SAIL-URPM8W-3-1.5U	1	1475170150
SAIL-URPM12W-2L-1.5U	1	1475450150
SAIL-URPM8W-2L-1.5U	1	1475470150
SAIL-URZM12G-C-1.5U	1	1475030150
SAIL-URZM12W-C-1.5U	1	1475040150
SAIL-URZM8G-3-1.5U	1	1475050150
SAIL-URZM8W-3-1.5U	1	1475060150

Type	Qty.	Order No.
SAIL-URPM12G-C-1.5V	1	1475280150
SAIL-URPM12W-C-1.5V	1	1475290150
SAIL-URPM12G-O-1.5V	1	1475300150
SAIL-URPM12W-O-1.5V	1	1475310150
SAIL-URPM12G-4-1.5V	1	1475320150
SAIL-URPM12W-4-1.5V	1	1475330150
SAIL-URPM8G-C-1.5V	1	1475340150
SAIL-URPM8W-C-1.5V	1	1475350150
SAIL-URPM12W-2L-1.5V	1	1475500150
SAIL-URPM8W-2L-1.5V	1	1475510150

Accessories

Mounting tool
Tool set with torque function
<b>Note</b>

Type	Qty.	Order No.
Screwty Set-DM	1	1920000000

Type	Qty.	Order No.
Screwty Set-DM	1	1920000000

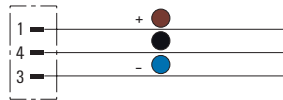
M12 cables with connector at one end only

IP67

B

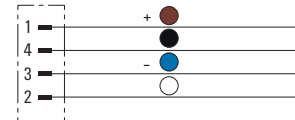
3-pin

Female



4-pin

Female



Technical data

Rated current
Rated voltage
Temperature range of housing
Core cross-section
Protection degree
Contact surface
Sheath material
Insulation
<b>Note</b>

4 A
250 V
-25...+85 °C
0.34 mm <sup>2</sup>
IP65, IP66, IP67, IP68, when screwed in
Gold-plated
PVC
PVC
<b>Note</b>

4 A
250 V
-25...+85 °C
0.34 mm <sup>2</sup>
IP65, IP66, IP67, IP68, when screwed in
Gold-plated
PVC
PVC
<b>Note</b>

Ordering data

<b>Female. straight</b>
M12 straight socket, PVC
M12 straight socket, halogen-free PUR
M12 straight socket, halogen-free PUR, yellow
M12 straight socket, halogen-free PUR, resistant to welding beads
<b>Female. angled</b>
M12 angled socket, PVC
M12 angled socket, halogen-free PUR
M12 angled socket, halogen-free PUR, yellow
M12 angled socket, halogen-free PUR, resistant to welding beads
<b>Note</b>

Type	Qty.	Order No.
SAIL-M12BG-3-1.5V	1	1925570150
SAIL-M12BG-3-1.5U	1	9457820150
SAIL-M12BG-3-1.5UGE	1	1092910150
SAIL-M12BG-3-1.5T	1	1968590150
SAIL-M12BW-3-1.5V	1	1925630150
SAIL-M12BW-3-1.5U	1	9457320150
SAIL-M12BW-3-1.5UGE	1	1092940150
SAIL-M12BW-3-1.5T	1	1968560150
<b>Note</b>		

Type	Qty.	Order No.
SAIL-M12BG-4-1.5T	1	1968580150
SAIL-M12BG-4-1.5U	1	9457730150
SAIL-M12BG-4-1.5UGE	1	1092920150
SAIL-M12BG-4-1.5V	1	1925580150
SAIL-M12BW-4-1.5V	1	1925640150
SAIL-M12BW-4-1.5U	1	9457740150
SAIL-M12BW-4-1.5UGE	1	1092960150
SAIL-M12BW-4-1.5T	1	1968570150
<b>Note</b>		

Accessories

<b>Mounting tool</b>
Tool set with torque function
<b>Note</b>

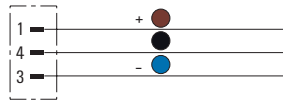
Type	Qty.	Order No.
Screwty Set -DM	1	1920000000
<b>Note</b>		

Type	Qty.	Order No.
Screwty Set -DM	1	1920000000
<b>Note</b>		

M8 cables with connector at one end only

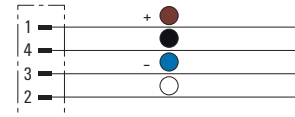
3-pin

Female



4-pin

Female



Technical data

Rated current
Rated voltage
Temperature range of housing
Core cross-section
Protection degree
Contact surface
Sheath material
Insulation
<b>Note</b>

4 A
60 V
-25...+85 °C
0.25 mm <sup>2</sup>
IP65, IP66, IP67, IP68, when screwed in
Gold-plated
PVC
PVC

4 A
30 V
-25...+85 °C
0.25 mm <sup>2</sup>
IP65, IP66, IP67, IP68, when screwed in
Gold-plated
PVC
PVC

Ordering data

<b>Female. straight</b>
M8 straight socket, PVC
M8 straight socket, halogen-free PUR
M8 straight socket, halogen-free PUR, yellow
<b>Female. angled</b>
M8 angled socket, PVC
M8 angled socket, halogen-free PUR
M8 angled socket, halogen-free PUR, yellow
<b>Note</b>

Type	Qty.	Order No.
SAIL-M8BG-3-1.5V	1	1927240150
SAIL-M8BG-3-1.5U	1	9457450150
SAIL-M8BG-3-1.5UGE	1	1093190150
SAIL-M8BW-3-1.5V	1	1927320150
SAIL-M8BW-3-1.5U	1	9457380150
SAIL-M8BW-3-1.5UGE	1	1093220150

Type	Qty.	Order No.
SAIL-M8BG-4-1.5V	1	1927260150
SAIL-M8BG-4-1.5U	1	9457850150
SAIL-M8BG-4-1.5UGE	1	1093200150
SAIL-M8BW-4-1.5V	1	1927340150
SAIL-M8BW-4-1.5U	1	9456150150
SAIL-M8BW-4-1.5UGE	1	1093240150

Accessories

<b>Mounting tool</b>
Tool set with torque function
<b>Note</b>

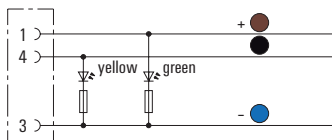
Type	Qty.	Order No.
Screwty Set -DM	1	1920000000

Type	Qty.	Order No.
Screwty Set -DM	1	1920000000

M12/M8 cables with connector at one end only with LED

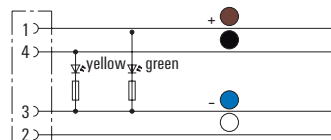
3-pin / 2 LEDs

Female



4-pin / 2 LEDs

Female



Technical data

Rated current
Rated voltage
Temperature range of housing
Core cross-section
Protection degree
Contact surface
Sheath material
Insulation
Note

4 A
24 V
-25...+85 °C
M12: 0.34 mm <sup>2</sup> / M8: 0.25 mm <sup>2</sup>
IP65, IP66, IP67, IP68, when screwed in
Gold-plated
PVC
PVC
Note

4 A
24 V
-25...+85 °C
M12: 0.34 mm <sup>2</sup> / M8: 0.25 mm <sup>2</sup>
IP65, IP66, IP67, IP68, when screwed in
Gold-plated
PVC
PVC
Note

Ordering data

Female, angled	
M12 angled socket, PVC	
M12 angled socket, halogen-free PUR	
M12 angled socket, halogen-free PUR, yellow	
M12 angled socket, halogen-free PUR, resistant to welding beads	
M8 angled socket, PVC	
M8 angled socket, halogen-free PUR	
M8 angled socket, halogen-free PUR, yellow	
Note	

Type	Qty.	Order No.
SAIL-M12BW-3L1.5V	1	1925460150
SAIL-M12BW-3L1.5U	1	9457800150
SAIL-M12BW-3L1.5UGE	1	1114880150
SAIL-M12BW-3L1.5T	1	1004330150
SAIL-M8BW-3L1.5V	1	1927350150
SAIL-M8BW-3L1.5U	1	9457460150
SAIL-M8BW-3L1.5UGE	1	1093210150
Note		

Type	Qty.	Order No.
SAIL-M12BW-4-2L1.5V	1	1925470150
SAIL-M12BW-4-2L1.5U	1	9456380150
SAIL-M12BW-4-2L1.5UGE	1	1092950150
SAIL-M12BW-4-2L1.5T	1	1007000150
SAIL-M8BW-4L1.5V	1	1927360150
SAIL-M8BW-4L1.5U	1	1906400150
SAIL-M8BW-4L1.5UGE	1	1093230150
Note		

Accessories

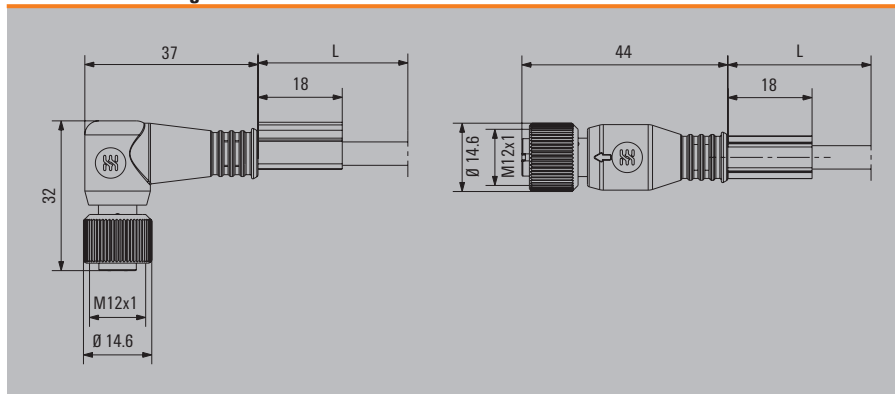
Mounting tool	
Tool set with torque function	
Note	

Type	Qty.	Order No.
Screwty Set -DM	1	1920000000
Note		

Type	Qty.	Order No.
Screwty Set -DM	1	1920000000
Note		

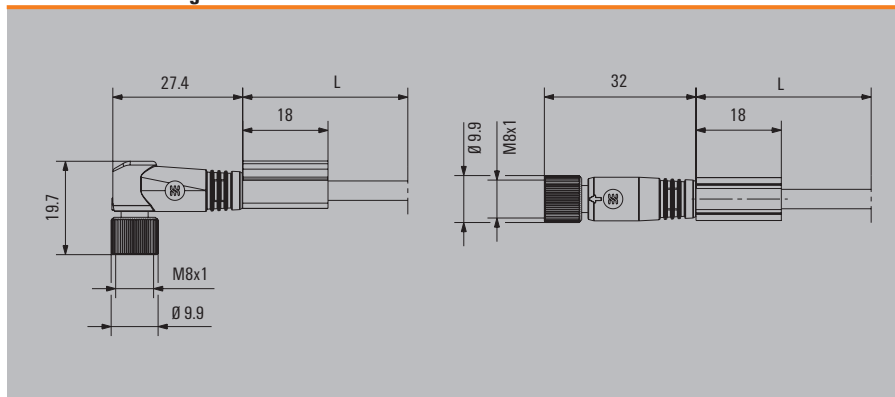
M12 straight/angled socket

Dimensioned drawing



M8 straight/angled socket

Dimensioned drawing



Screwty® set-DM

Contents:

- 1x interchangeable bit
- 1x torque handle
- 1x adjustment aid for Screwty® torque (M8: 0.5 - 0.6 Nm / M12: 0.8 - 1.2 Nm)
- 1x Screwty® M12, M8, M12 F, M8 F attachment

Ordering data

Type	Qty.	Order No.
Screwty®-Set-DM	1	1920000000





# Index

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<b>Index</b>	Index Type	X.2
	Index Order No.	X.4
	Addresses worldwide	X.8

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Order No.	Type	Page
9202210000	multi-stripax 6-16	A.63
9202210000	multi-stripax 6-16	A.64
9202210000	multi-stripax 6-16	A.65
9202210000	multi-stripax 6-16	A.77
9202210000	multi-stripax 6-16	A.78

## 9440000000

9445700000	RS 16IO 1W H S	A.29
9445700000	RS 16IO 1W H S	A.35
9445700000	RS 16IO 1W H S	A.45
9445700000	RS 16IO 1W H S	A.50

## 9450000000

9456050000	SAI-SK-M12	B.14
9456050000	SAI-SK-M12	B.22
9456050000	SAI-SK-M12	B.28
9456050000	SAI-SK-M12	B.32
9456050000	SAI-SK-M12	B.37
9456150150	SAIL-M8BW-4-1.5U	B.47
9456380150	SAIL-M12BW-4-2L1.5U	B.48
9457320150	SAIL-M12BW-3-1.5U	B.46
9457380150	SAIL-M8BW-3-1.5U	B.47
9457450150	SAIL-M8BG-3-1.5U	B.47
9457460150	SAIL-M8BW-3L1.5U	B.48
9457730150	SAIL-M12BG-4-1.5U	B.46
9457740150	SAIL-M12BW-4-1.5U	B.46
9457800150	SAIL-M12BW-3L1.5U	B.48
9457820150	SAIL-M12BG-3-1.5U	B.46
9457850150	SAIL-M8BG-4-1.5U	B.47





# Addresses worldwide

## Let's connect.

**AE United Arab Emirates**

Weidmüller Middle East FZE  
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Tel. +971 65572723  
Fax +971 65572724  
wme.info@weidmuller.com

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