Automation Products - u-remote IP20
UR20-PF-O-1DI-SIL

Weidmüller Interface GmbH & Co. KG
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www.weidmueller.com

Product image

SIL3; OSSD outputs; wire breakage and short-circuit detection

Safety technology is of central importance in industrial automation and machine building. If you want to reduce risks and avoid dangers for people and environment, you need solutions which satisfy stringent requirements and statutory specifications. The safety modules of the u-remote system have key features such as emergency-stop circuits and wire-breakage or short-circuit detection. They meet 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. Restarting is either carried out in manual mode or using the autostart function. In addition, Weidmüller safety modules reduce maintenance and service times and improve response times in case of emergency – thanks to a concept of maximum transparency, e.g. using OSSD outputs.

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

General ordering data

Type	UR20-PF-O-1DI-SIL
Order No.	1335030000
Version	Remote I/O module, IP20, Safety, SIL power supply
GTIN (EAN)	4050118138177
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Width	11.5 mm	Width (inches)	0.453 inch
Height	120 mm	Height (inches)	4.724 inch
Depth	76 mm	Depth (inches)	2.992 inch
Mounting dimension - height	128 mm	Net weight	109 g

Temperatures

Operating temperature, max.	60 °C	Operating temperature, min.	-20 °C
Storage temperature, max.	85 °C	Storage temperature, min.	-40 °C
Operating temperature	-20 °C ... +60 °C	Storage temperature	-40 °C ... +85 °C

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1

Connection data

Type of connection	PUSH IN	Wire connection cross section, finely stranded, max.	1.5 mm²
Wire connection cross-section, finely stranded, min.	0.14 mm²	Wire cross-section, finely stranded, max. (AWG)	AWG 16
Wire cross-section, finely stranded, min. (AWG)	AWG 26	Wire cross-section, solid, max.	1.5 mm²
Wire cross-section, solid, max. (AWG)	AWG 16	Wire cross-section, solid, min.	0.14 mm²
Wire cross-section, solid, min. (AWG)	AWG 26		

General data

Air humidity (operation)	10% to 95%, non-condensing as per DIN EN 61131-2	Air humidity (storage)	10% to 95%, non-condensing as per DIN EN 61131-2
Air humidity (transport)	10% to 95%, non-condensing as per DIN EN 61131-2	Air pressure (operation)	≥ 795 hPa (height ≤ 2000 m) as per DIN EN 61131-2
Air pressure (storage)	1013 hPa (height 0 m) to 700 hPa (height 3000 m) as per DIN EN 61131-2	Air pressure (transport)	1013 hPa (height 0 m) to 700 hPa (height 3000 m) as per DIN EN 61131-2
Pollution severity	2	Shock	15 g over 11 ms, half sinus wave, acc. to IEC 60068-2-27
Surge voltage category	II	Test voltage	500 V
UL 94 flammability rating	V-0	Vibration resistance	5 Hz ≤ f ≤ 8.4 Hz: 3.5-mm amplitude as per IEC 60068-2-6, 8.4 Hz ≤ f ≤ 150 Hz: 1 g acceleration as per IEC 60068-2-6

Power supply

Current consumption from I_{IN} (power segment of the field bus coupler), typ.	8 mA	Current consumption from I_{IN} (the respective power segment)	35 mA
Feed current for I_{OUT} (output current path) , max.	8,050 mA	Supply voltage for outputs	24 V DC +20 %/ -15 %
Supply voltage system and inputs	24 V DC +20 %/ -15 %	Voltage supply	24 V DC +20 %/ -15 %, via the system bus

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Technical data

Safety-related data

MTTF	100 Years	Proportion of safety-related outages (SFF)	98 %
Safety category	SIL 3		

System data

Field bus protocol	CANopen, DeviceNet, EtherCAT, EtherNet/IP, Modbus/TCP, PROFINET IRT, PROFIBUS DP-V1, POWERLINK	Galvanic isolation	Yes, between field and system bus
Interface	u-remote system bus	Module type	Safe power-feed module
Transmission speed of system bus, max.	48 Mbit		

Classifications

ETIM 6.0	EC001600	ETIM 7.0	EC001600
eClass 9.0	27-24-26-10	eClass 9.1	27-24-26-10
eClass 10.0	27-24-26-10		

Approvals

Approvals	c UL us LISTED; c UL us LISTED FOR HAZ.LOC. C1D2; ATEX; EAC; FUNCTIONAL SAFETY CERTIFIED; IEC EX; KC
ROHS	Conform

Downloads

Approval/Certificate/Document of Conformity	Declaration_of_Conformity TÜV_certificate_Safety-power_feed_module.pdf Technical_Report_Product_Safety-power_feed_module.pdf
Engineering Data	WSCAD, Zuken E3.S, EPLAN
Engineering Data	STEP
Product Change Notification	Release-Notes - Firmware
Software	Firmware UR20-PF-SIL UR20_PF_SIL-0002594-01_13_00-1
User Documentation	MAN_U-REMOTE_DE MAN_U-REMOTE_EN MAN_U-REMOTE_FS_DE MAN_U-REMOTE_FS_EN

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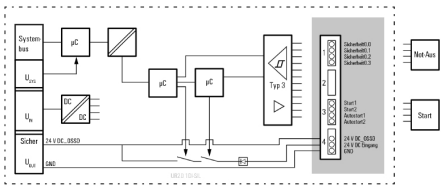
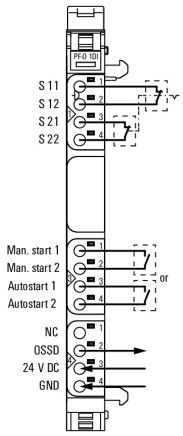
Drawings

Block diagram



Connection diagram



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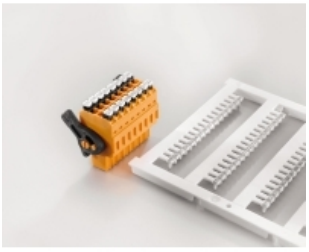
Accessories

Blank



Weidmüller has established new market standards with its MultiCard product line. This system is being continually extended with over 200 variants and by consistently extending the portfolio.

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

Type	PM 2.7/2.6 MC NE WS	Version
Order No.	1323710000	OMNIMATE Signal - series PM, Pusher markers, 2.7 x 2.6 mm, Pitch in
GTIN (EAN)	4050118126778	mm (P): 3.50 Weidmueller, white
Qty.	960 pc(s).	

Accessories

Potential-distribution modules; system accessory

A wide range of accessory modules is available for individual requirements of machine and plant engineering. Various potential distribution modules are available for the supply of sensors with 2- to 4-wire connection technology directly from the remote I/O system. These offer 16 "PUSH IN" potential points and supply your application with any 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.

General ordering data

Type	UR20-EBK-ACC	Version
Order No.	1346610000	End bracket, ,
GTIN (EAN)	4050118151596	
Qty.	5 pc(s).	

Type	UR20-SM-ACC	Version
Order No.	1339920000	Cover, ,
GTIN (EAN)	4050118144727	
Qty.	20 pc(s).	

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Accessories

Custom printing

The Dekafix (DEK) marker is the universal marker for all conductor and plug-in connectors as well as for electronic sub-assemblies. The system is ideal for short number sequences and covers a wide range of ready-printed markers.
Strips for fast installation in only one work step. The printing is easy to read, rich in contrast and available in various widths.

- Large range of ready-to-use markers
- Strips for fast installation
- Terminal markers, suitable for all Weidmüller cable connectors
- Available as blank MultiCard or with standard printing

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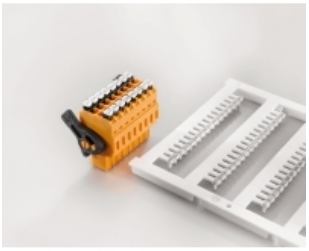
General ordering data

Type	DEK 5/8-11.5 MC SDR	Version
Order No.	1341610000	Dekafix, Terminal marker, 5 x 8 mm, Pitch in mm (P): 8.00
GTIN (EAN)	4050118146059	Weidmueller, To customer specification
Qty.	100 pc(s).	

Custom printing



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General ordering data

Type	PM 2.7/2.6 MC SDR	Version
Order No.	1323700000	OMNIMATE Signal - series PM, Pusher markers, 2.7 x 2.6 mm, Pitch in
GTIN (EAN)	4050118126761	mm (P): 3.50 Weidmueller, To customer specification
Qty.	192 pc(s).	

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Accessories

TS 35

General ordering data

Type	TS 35X7.5/LL 2M/ST/SZ	Version
Order No.	7915060000	Rail, TS 35, TS 35 x 7.5, with slot, Steel, galvanic zinc plated and
GTIN (EAN)	4032248296279	passivated
Qty.	2 m	
Type	TS 35X7.5 2M/ST/ZN	Version
Order No.	0383400000	Rail, TS 35, TS 35 x 7.5, without slot, Steel, galvanic zinc plated and
GTIN (EAN)	4008190088026	passivated
Qty.	2 m	
Type	TS 35X7.5/LL 2M/ST/ZN	Version
Order No.	0514500000	Rail, TS 35, TS 35 x 7.5, with slot, Steel, galvanic zinc plated and
GTIN (EAN)	4008190046019	passivated
Qty.	2 m	
Type	TS 35X7.5/LL 1M/ST/ZN	Version
Order No.	0514510000	Rail, TS 35, TS 35 x 7.5, with slot, Steel, galvanic zinc plated and
GTIN (EAN)	4008190116620	passivated
Qty.	1 m	
Type	TS 35X7.5 2M/CRN	Version
Order No.	1747350000	Rail, TS 35, TS 35 x 7.5, without slot, Stainless steel, rust-proof,
GTIN (EAN)	4032248003372	untreated
Qty.	2 m	
Type	TS 35X7.5 2M/AL/BK	Version
Order No.	0330800000	Rail, TS 35, TS 35 x 7.5, without slot, Aluminium, untreated
GTIN (EAN)	4008190100650	
Qty.	2 m	

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Accessories

Blank

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General ordering data

Type	DEK 5/8-11.5 MC NE WS	Version
Order No.	1341630000	Dekafix, Terminal marker, 5 x 8 mm, Pitch in mm (P): 8.00
GTIN (EAN)	4050118145946	Weidmueller, white
Qty.	500 pc(s).	