

## UR20-PF-O-1DI-SIL

**Weidmüller Interface GmbH & Co. KG**

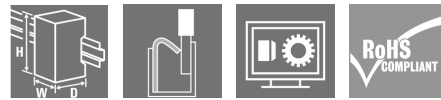
Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://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

Version	Remote I/O module, IP20, Safety, SIL power supply
Order No.	<a href="#">1335030000</a>
Type	UR20-PF-O-1DI-SIL
GTIN (EAN)	4050118138177
Qty.	1 pc(s).
Replacement parts	<a href="#">1350970000</a> <a href="#">1347520000</a> <a href="#">1346560000</a>

Creation date March 15, 2024 5:22:19 PM CET

Catalogue status 09.03.2024 / We reserve the right to make technical changes.

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## Technical data

## Dimensions and weights

Depth	76 mm	Depth (inches)	2.992 inch
Height	120 mm	Height (inches)	4.724 inch
Width	11.5 mm	Width (inches)	0.453 inch
Mounting dimension - height	128 mm	Net weight	108 g

## Temperatures

Storage temperature	-40 °C ... +85 °C	Operating temperature	-20 °C ... +60 °C
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## digital inputs

Short-circuit detection	Yes	Wire break detection	Yes
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## Connection data

Type of connection	PUSH IN	Wire connection cross section, finely stranded, max.	1.5 mm <sup>2</sup>
Wire connection cross section, finely stranded, min.	0.14 mm <sup>2</sup>	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 mm <sup>2</sup>
Wire cross-section, solid, max. (AWG)	AWG 16	Wire cross-section, solid, min.	0.14 mm <sup>2</sup>
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	Rail	TS 35
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 <sub>IN</sub> (the respective power segment)	35 mA	
Current consumption from I <sub>sys</sub> , typ.	8 mA	
Feed current for I <sub>OUT</sub> (output current path)	max.	8,050 mA
	nominal	8,050 mA
	min.	8,050 mA
Feed current for I <sub>OUT</sub> (output current path), max.	8,050 mA	
Supply voltage for outputs	24 V DC +20 %/ -15 %	

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## Technical data

Supply voltage system and inputs	24 V DC +20 %/ -15 %
Voltage supply	24 V DC +20 %/ -15 %, via the system bus

### Safety characteristics in acc. with EN 61508

HFT (hardware fault tolerance), inputs	1	Proportion of safety-related outages (SFF)	98 %
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### Safety characteristics in acc. with EN ISO 13849

MTTF	100 a
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### System data

Field bus protocol	PROFINET IRT, PROFINET RT, PROFIBUS DP-V1, EtherCAT, Modbus/TCP, EtherNet/IP, CANopen, DeviceNet, POWERLINK, CC-Link, CC-Link IE TSN, IEC 61162-450	Galvanic isolation	500 V DC between the current paths
Interface	u-remote system bus	Module type	Safe power-feed module
Transmission speed of system bus, max. 48 Mbit			

### Classifications

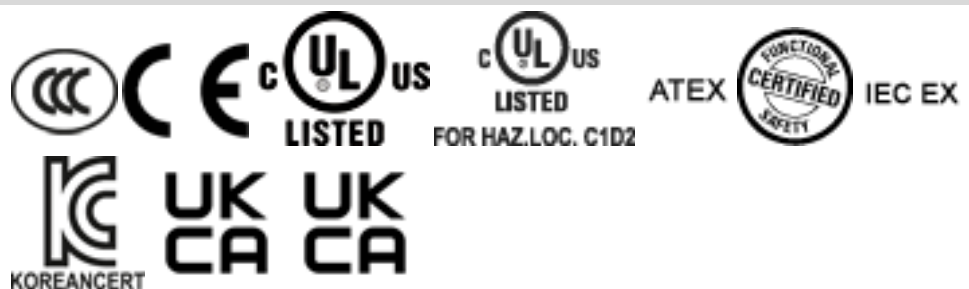
ETIM 6.0	EC001600	ETIM 7.0	EC001600
ETIM 8.0	EC001600	ETIM 9.0	EC001600
ECLASS 9.0	27-24-26-10	ECLASS 9.1	27-24-26-10
ECLASS 10.0	27-24-26-10	ECLASS 11.0	27-24-26-10
ECLASS 12.0	27-24-26-10	ECLASS 13.0	27-24-26-10

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	82327f13-cd27-455a-ab5b-a62e1996dcf8

### Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E141197
Certificate no. (cULusEX)	E223527

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## Technical data

### Downloads

Approval/Certificate/Document of Conformity	<a href="#">KC certificate</a> <a href="#">TÜV_certificate_Safety-power_feed_module.pdf</a> <a href="#">Technical_Report_Product_Safety-power_feed_module.pdf</a> <a href="#">DEMKO15ATEX1525X</a> <a href="#">UKCA Declaration of Conformity - EN</a> <a href="#">CE Declaration of Conformity - DE</a>
Engineering Data	<a href="#">CAD data – STEP</a> <a href="#">Compatibility information – Combinability of UR20</a>
Engineering Data	<a href="#">Zuken E3.S</a>
Product Change Notification	<a href="#">Release-Notes - Firmware</a> <a href="#">20230925 Produktkonsolidierung UR20-PF-O-...-SIL modules</a> <a href="#">20230925 Product Change Notification UR20-PF-O-...-SIL modules</a>
Software	<a href="#">Firmware – Current firmware UR20-PF-SIL</a> <a href="#">Library and function block – SISTEMA library 2.0</a>
User Documentation	<a href="#">MAN_U-REMOTE_DE</a> <a href="#">MAN_U-REMOTE_EN</a> <a href="#">MAN_U-REMOTE_FS_DE</a> <a href="#">MAN_U-REMOTE_FS_EN</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>

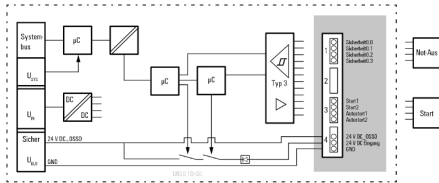
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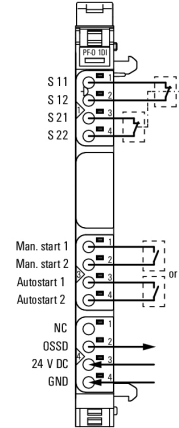
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**Drawings**

**Block diagram**

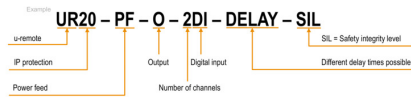


**Connection diagram**



**Explanation of abbreviations**

**Safe power-feed modules**



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**Replacement parts****Electronic modules****General ordering data**

Type	UR20-EM-1335030000-SP	Version
Order No.	<a href="#">1347520000</a>	Replacement part
GTIN (EAN)	4050118248234	
Qty.	1 pc(s).	

**Plugkit****General ordering data**

Type	UR20-PK-1335030000-SP	Version
Order No.	<a href="#">1346560000</a>	Replacement part, Plug-in connector, ,
GTIN (EAN)	4050118151510	
Qty.	5 pc(s).	

**Data sheet****UR20-PF-O-1DI-SIL**

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**Replacement parts****Basic modules****General ordering data**

Type	UR20-BM-PF-O-SIL-SP	Version	Packaging
Order No.	<a href="#">1350970000</a>	Replacement part , Flange-mounted housing	Cardboard
GTIN (EAN)	4050118398342		box
Qty.	5 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

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

## Accessories



## System accessory

Discover a wide range of accessories for your u-remote system - the ideal addition to make your applications even more efficient and flexible.

## General ordering data

Type	UR20-SM-ACC	Version	
Order No.	<a href="#">1339920000</a>	Cover, ,	
GTIN (EAN)	4050118144727		
Qty.	20 pc(s).		
Type	UR20-EBK-ACC	Version	
Order No.	<a href="#">1346610000</a>	End bracket, ,	
GTIN (EAN)	4050118151596		
Qty.	5 pc(s).		



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**Accessories**

**Steel**



Steel DIN rails are the most widespread on the market. Among metal DIN rails, they have the lowest shortcircuit protection, similar to stainless steel.

**General ordering data**

Type	TS 35X7.5/LL 1M/ST/ZN	Version
Order No.	<a href="#">0514510000</a>	Rail, TS 35, TS 35 x 7.5, with slot, Steel, galvanic zinc plated and passivated
GTIN (EAN)	4008190116620	
Qty.	1 m	
Type	TS 35X7.5/LL 2M/ST/SZ	Version
Order No.	<a href="#">7915060000</a>	Rail, TS 35, TS 35 x 7.5, with slot, Steel, galvanic zinc plated and passivated
GTIN (EAN)	4032248296279	
Qty.	2 m	
Type	TS 35X7.5 2M/ST/ZN	Version
Order No.	<a href="#">0383400000</a>	Rail, TS 35, TS 35 x 7.5, without slot, Steel, galvanic zinc plated and passivated
GTIN (EAN)	4008190088026	
Qty.	2 m	
Type	TS 35X7.5/LL 2M/ST/ZN	Version
Order No.	<a href="#">0514500000</a>	Rail, TS 35, TS 35 x 7.5, with slot, Steel, galvanic zinc plated and passivated
GTIN (EAN)	4008190046019	
Qty.	2 m	

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**Accessories**

**Blank**



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- Terminal markers, suitable for all Weidmüller cable connectors
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**General ordering data**

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

**Blank**



**General ordering data**

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

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**Accessories**

**Aluminum**



Aluminum has the second best electrical conductivity after copper. One advantage is low weight, anMiscellaneous is outstanding corrosion protection.

**General ordering data**

Type	TS 35X7.5 2M/AL/BK	Version
Order No.	<a href="#">0330800000</a>	Rail, TS 35, TS 35 x 7.5, without slot, Aluminium, untreated
GTIN (EAN)	4008190100650	
Qty.	2 m	

**Stainless steel**



Stainless steel is a collective term for all types of steel (alloys) with a high degree of purity and corrosion resistance.

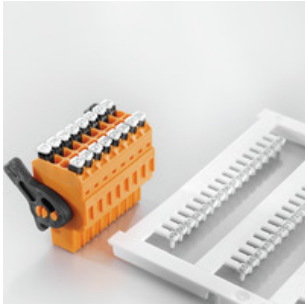
**General ordering data**

Type	TS 35X7.5 2M/CRN	Version
Order No.	<a href="#">1747350000</a>	Rail, TS 35, TS 35 x 7.5, without slot, Stainless steel, rust-proof,
GTIN (EAN)	4032248003372	Stainless steel 1.4301, untreated
Qty.	2 m	

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**Accessories****Custom printing****General ordering data**

Type	PM 2.7/2.6 MC SDR	Version
Order No.	<a href="#">1323700000</a>	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).	