

Automation Products - u-remote IP20 UR20-8DI-PN-FSOE-V2

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Product image, Similar to illustration



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	UR20-8DI-PN-FSOE-V2
Order No.	246460000
Version	Remote I/O module, IP20, Safety, Digital signals, 8-channel
GTIN (EAN)	4050118479409

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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	89.69 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

digital inputs

Individual channel diagnosis	Yes	Input filter	configurable
Input voltage, high	> 11 V	Input voltage, low	< 5 V
Module diagnosis	Yes	Number	8
Reverse polarity protection	Yes	Sensor connection	2-wire, 3-wire, 4-wire
Sensor supply	Yes	Type	Types 1 and 3, EN 61131-2

digital outputs

Individual channel diagnosis	Yes	Module diagnosis	Yes
Number	8	Type	Types 1 and 3, EN 61131-2

Connection data

Type of connection	PUSH IN	Wire connection cross section, finely stranded, max.	1.5 mm ²
Wire connection cross-section, finely stranded, min.	0.14 mm ²	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 ²
Wire cross-section, solid, max. (AWG)	AWG 16	Wire cross-section, solid, min.	0.14 mm ²
Wire cross-section, solid, min. (AWG)	AWG 26		

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Technical data**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 _{OUT} (the respective power segment)	30 mA
Reverse polarity protection	Yes	Voltage supply	24 V DC +20%/ -15%, via the system bus

Safety-related data

MTTF	100 Years	Probability of outage PFH	Input, single-channel wiring: 2*10 ⁻⁹ ; Dual-channel wiring: 4.07*10 ⁻¹¹ ;
Proportion of safety-related outages (SFF)	98 %	Safety category	SIL 3

System data

Field bus protocol	EtherCAT	Galvanic isolation	500 V DC between the current paths
Interface	u-remote system bus	Module type	Safe input module
Possible connection	2 conductor, 4 conductors	Transmission speed of system bus, max.	48 Mbit

Classifications

ETIM 6.0	EC001597	eClass 6.2	27-24-26-10
eClass 9.0	27-24-26-02	eClass 9.1	27-24-26-02

Approvals

Approvals



ROHS Conform

Data sheet**Automation Products - u-remote IP20
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Technical data**Downloads**

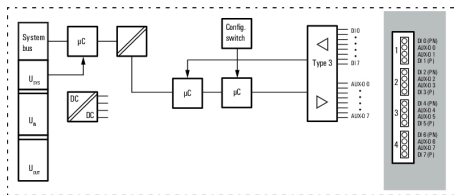
Approval/Certificate/Document of Conformity	Declaration_of_Conformity
Engineering Data	STEP
Product Change Notification	Release-Notes - Firmware
Software	UR20-8DI-PN-FSOE-V2-0008080-01_00_04-7
User Documentation	MAN_U-REMOTE_DE MAN_U-REMOTE_EN MAN_U-REMOTE_FS_DE MAN_U-REMOTE_FS_EN

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Drawings

Block diagram



Connection diagram

