

UR20-4DI-2W-230V-AC**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image****Digital input modules P- or N-switching; Reverse polarity protection, up to 3-wire +FE**

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 µs resolution. Further solutions are possible with

the module UR20-4DI-2W-230V-AC which works with accurate current up to 230V as an input signal.

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

General ordering data

Version	Remote I/O module, IP20, Digital signals, Input, 4-channel
Order No.	1550070000
Type	UR20-4DI-2W-230V-AC
GTIN (EAN)	4050118356380
Qty.	1 pc(s).

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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
Mounting dimension - height	128 mm	Net weight	89 g
Width	11.5 mm	Width (inches)	0.453 inch

Temperatures

Storage temperature	-40 °C ... +85 °C	Operating temperature	-20 °C ... +60 °C
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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digital inputs

Individual channel diagnosis	No	Input filter	configurable, 10 ms
Input frequency	50 Hz, 60 Hz	Input voltage, high	≥ 80 V
Input voltage, low	< 65 V	Max. input frequency	60 Hz
Module diagnosis	Yes	Number of digital inputs	4
Reverse polarity protection	Yes	Sensor connection	2-wire
Sensor supply	No	Supply voltage (input)	277 V AC (UL), 265 V AC (VDE)
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		

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		
Restricted area	Positive expansion	X coordinate	43 mm
		Z coordinate	85 mm
		Y coordinate	160 mm
	Type of restricted area	thermal	
	Negative expansion	Z coordinate	0 mm
		Y coordinate	-40 mm
		X coordinate	-28 mm
Shock	15 g over 11 ms, half sinus wave, acc. to IEC 60068-2-27		
Surge voltage category	II		

Creation date March 24, 2021 5:48:05 AM CET

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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} (power segment of the fieldbus coupler), typ.	min.	8 mA
	nominal	8 mA
	max.	8 mA
Current consumption from I _{IN} (the respective power segment)	max.	0
	nominal	0
	min.	0
Reverse polarity protection	Yes	
Supply voltage (input)	277 V AC (UL), 265 V AC (VDE)	
Voltage supply	24 V DC +20 %/ -15 %, via the system bus	

RS interface

Individual channel diagnosis	No	Module diagnosis	Yes
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Serial inputs

Individual channel diagnosis	No	Module diagnosis	Yes
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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	
Interface	u-remote system bus	Line-to-line voltage	500 V DC between the current paths 400 V is possible between the channels
Module type	Digital input module	Possible connection	2-wire
Transmission speed of system bus, max. 48 Mbit			

Classifications

ETIM 6.0	EC001599	ETIM 7.0	EC001599
ECLASS 9.0	27-24-26-04	ECLASS 9.1	27-24-26-04
ECLASS 10.0	27-24-26-04	ECLASS 11.0	27-24-26-04

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Technical data**Approvals**

Approvals



ROHS	Conform
UL File Number Search	E141197

Downloads

Approval/Certificate/Document of Conformity	Declaration of Conformity Compass safe distance certificate Lloyds Register certificate DNV/GL certificate ABS certificate RINA certificate Bureau Veritas - Type Approval Certificate PRS (Polish Register of Shipping) NIPPON KAIJI KYOKAI Certificate
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD, Zuken E3.S
User Documentation	MAN_U-REMOTE_DE MAN_U-REMOTE_EN

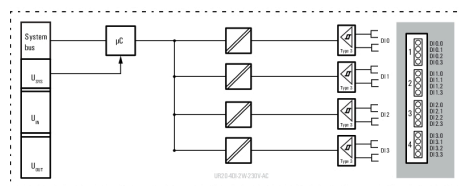
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Drawings

Block diagram



Connection diagram

