

UR20-8DI-P-3W-HD

Weidmüller Interface GmbH & Co. KG

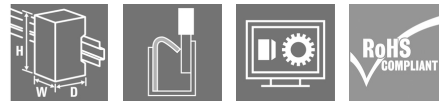
Klingenbergstraße 26

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 mod-

ule 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, 8-channel, Digital signals, Input
Order No.	1315190000
Type	UR20-8DI-P-3W-HD
GTIN (EAN)	4050118118230
Qty.	1 pc(s).
Replacement parts	1350930000 1346670000 1518800000

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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	66 g

Temperatures

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

Individual channel diagnosis	No	
Input filter	configurable	
Input voltage, high	> 11 V	
Input voltage, low	<5 V	
Module diagnosis	Yes	
Number of digital inputs	8	
Reverse polarity protection	Yes	
Sensor connection	2-wire, 3-wire	
Sensor supply	Yes	
Sensor supply	min.	0 mA
	max.	8,000 mA
	nominal	750 mA
Type	Types 1 and 3, EN 61131-2	

Connection data

Wire connection cross section, finely stranded, max.	0.35 mm ²	Wire connection cross section, finely stranded, min.	0.14 mm ²
Wire cross-section, finely stranded, max. (AWG)	AWG 22	Wire cross-section, finely stranded, min. (AWG)	AWG 26
Wire cross-section, solid, max.	0.35 mm ²	Wire cross-section, solid, max. (AWG)	AWG 22
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
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		

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Power supply

Current consumption from I_{IN} (the respective power segment)	<22 mA + sensor feed	Current consumption from I_{sys} , typ.	8 mA
Reverse polarity protection	Yes	Voltage supply	24 V DC +20 %/ -15 %, via the system bus

System data

Diagnostic 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
	1 Byte		
Galvanic isolation	500 V DC between the current paths	Interface	u-remote system bus
Module type	Digital input module	Possible connection	3-wire, Single-conductor, 2-wire
Process data	8 Bit	Transmission speed of system bus, max.	48 Mbit

Classifications

ETIM 6.0	EC001599	ETIM 7.0	EC001599
ETIM 8.0	EC001599	ETIM 9.0	EC001599
ETIM 10.0	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	ECLASS 12.0	27-24-26-04
ECLASS 13.0	27-24-26-04	ECLASS 14.0	27-24-26-04
ECLASS 15.0	27-24-26-04		

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cl
REACH SVHC	Lead 7439-92-1
SCIP	82327f13-cd27-455a-ab5b-a62e1996dcf8

Important note

Product information	Note: Please order connector (1469340000) separately
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Technical data

Approvals

Approvals



Approvals MAMID

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

Downloads

Approval/Certificate/Document of Conformity	KC certificate Lloyds Register certificate DNV certificate ABS certificate RINA certificate Bureau Veritas - Type Approval Certificate PRS (Polish Register of Shipping) NIPPON KAIJI KYOKAI Certificate - ClassNK DEMKO15ATEX1525X KR Korean register certificate CCC certificate CCS certificate UKCA Declaration of Conformity - EN CE Declaration of Conformity - DE
Engineering Data	CAD data – STEP Compatibility information – Combinability of UR20
User Documentation	Handbuch u-remote DE Manual u-remote EN
Catalogues	Catalogues in PDF-format

Creation date May 15, 2025 9:41:32 PM CEST

Catalogue status 10.05.2025 / We reserve the right to make technical changes.

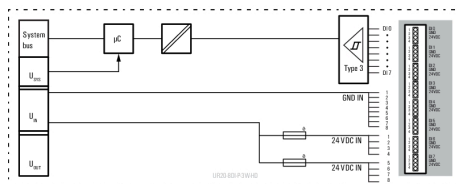
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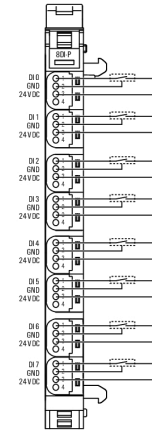
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Drawings

Block diagram



Connection diagram



Explanation of abbreviations

Digital input modules

