

UR20-8DO-P

Weidmüller Interface GmbH & Co. KG

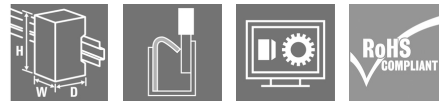
Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

**Digital output modules P- or N-switching; short-circuit-proof; up to 3-wire + FE**

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

Digital output modules are available in the following variants: 4 DO, 8 DO with 2- and 3-wire technology, 16 DO with or without PLC interface connection. They are mainly used for the incorporation of decentralised actuators. All outputs are designed for DC-13 actuators acc. to DIN EN 60947-5-1 and IEC 61131-2 specifications. As with the digital input modules, frequencies of up to 1 kHz are possible. Protection of the outputs ensures maximum system safety. This consists of an automatic restart following a short-circuit. Clearly visible LEDs signal the status of the entire module as well as the status of individual channels.

In addition to the standard applications of the digital output modules, the range also includes special variants such as the 4RO-SSR module for rapidly switching applications. Fitted with solid state technology, 0.5 A is available here to each output. Furthermore, there is also the 4RO-CO relay module for power-intensive applications. It is equipped with four CO contacts, optimised for a switching voltage of 255 V UC and designed for a switching current of 5 A.

General ordering data

Version	Remote I/O module, IP20, Digital signals, Output, 8-channel
Order No.	1315240000
Type	UR20-8DO-P
GTIN (EAN)	4050118118247
Qty.	1 pc(s).
Replacement parts	1350930000 1346720000 1346410000

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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	87 g

Temperatures

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

Actuator connection	2-wire
Feedback-free	Yes
Individual channel diagnosis	No
Inductive load (DC13)	0.2 Hz
Lamp load (12 W)	1 kHz
Max. response time, high	100 µs
Max. response time, low	250 µs
Module diagnosis	Yes
Number of digital outputs	8
Output current as per application	nominal 4,000 mA
	min. 0 mA
	max. 4,000 mA
Output current per channel, max.	500 mA
Output current per module, max.	4,000 mA
Resistive load (min. 47 Ω)	1 kHz
Response time of the protective circuit (current limiting)	< 100µs
Short-circuit-proof	Yes (thermal cut-out)
Simultaneity factor	nominal 100 %
	max. 100 %
	min. 0 %
Switch-off energy (inductive)	< 150 mJ / channel
Type	Lamp load, Ohmic, Inductive

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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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 _{OUT} (the respective power segment)	15 mA + load	Current consumption from I _{sys} , typ.	8 mA
Voltage supply	24 V DC +20 %/-15 %, via the system bus		

System data

Connection type	PUSH IN	Diagnostic data	1 Bit
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	Digital output module
Possible connection	2-wire	Process data	1 Byte
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

Creation date May 6, 2025 6:07:23 AM CEST

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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

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Downloads

Approval/Certificate/Document of Conformity	KC certificate
	Compass safe distance 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
	DEMKO 15ATEX1525X
	KR Korean register certificate
	CCC certificate
	CCS 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

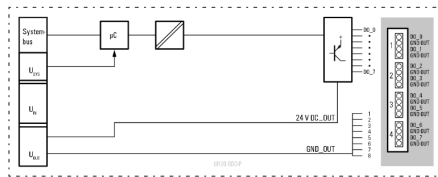
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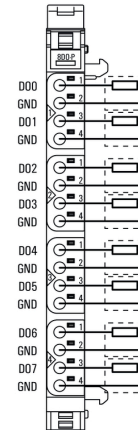
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Drawings

Block diagram



Connection diagram



Explanation of abbreviations

Digital output modules

