

## UR20-1COM-232-485-422

**Weidmüller Interface GmbH & Co. KG**

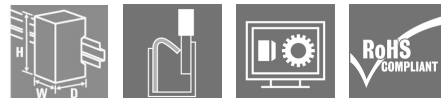
Klingenbergstraße 26

D-32758 Detmold

Germany

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

### Product image



### Digital counter and communication modules 100/500 kHz; 32-bit counter resolution; individual channel diagnosis

Incremental and absolute value encoders have become indispensable in today's automated systems. Developed especially for these applications, Weidmüller offers you various counter modules that can accept an input frequency up to 500 kHz. The synchronous-serial interface (SSI) module allows high precision positioning tasks to be realised with absolute value encoders. The module can be parameterised for listening or master mode operation in order to cope with all fields of application. A module with pulse input is available to you for frequency measurement up to 100 kHz and the UR20-1CNT-500 offers an input that can accept frequencies up to 500 kHz. The UR20-2CNT-100 module has two independent counter inputs; it is supplemented with the UR20-1CNT-100-1DO module with one counter, which however offers additional options thanks to a latch, gate and reset input. This allows external control of the counter. In addition, this module can trigger an immediate event via a digital output using a set reference value. The UR20-1COM-232-485-422 module offers you extended communication options; for example devices can be integrated consistently in u-remote systems via an RS232, RS485 or RS422 interface. The UR20-1COM-

SAI-PRO module presents a solution for connecting the control cabinet to the field. This gateway allows the integration of up to 15 decentral IP67 SAI-PRO Subbus modules per u-remote module.

The module electronics supply the connected sensors with power from the input current path (UIN).

### General ordering data

Version	Remote I/O module, IP20, 1-channel, RS232/RS485/RS422 communication, PUSH IN connection
Order No.	<a href="#">1315750000</a>
Type	UR20-1COM-232-485-422
GTIN (EAN)	4050118118858
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	87.03 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	Yes	Module diagnosis	Yes
Number	1	Short-circuit-proof	Yes

### Connection data

Number	1	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		
Restricted area	Positive expansion	X coordinate	43 mm
		Z coordinate	85 mm
	Type of restricted area	thermal	
		Negative expansion	Z coordinate
		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		
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 $I_{IN}$ (power segment of the field bus coupler), typ.	8 mA	Current consumption from $I_{IN}$ (the respective power segment)	50 mA + load
Voltage supply	24 V DC +20 %/ -15 %, via the system bus		

## RS interface

Connection type	1x RS232 / 1x RS485/422	Individual channel diagnosis	Yes
Module diagnosis	Yes	Number	1
Output current, supply voltage	0.5 A	Short-circuit-proof	Yes
Standards RS232	DIN 66020, DIN 66259, EIA-RS 232C, CCITT V.24/V.28	Standards RS485/422	DIN 66259 Part 1 und 3, EIA-RS 422/485, CCITT V.11
Transmission rate	configurable, 300 - 115200 Bit/s		

## Serial inputs

Connection type	1x RS232 / 1x RS485/422	Individual channel diagnosis	Yes
Module diagnosis	Yes	Number	1
Short-circuit-proof	Yes	Transmission rate	configurable, 300 - 115200 Bit/s

## System data

Connection type	1x RS232 / 1x RS485/422	Field bus protocol	CANopen, DeviceNet, EtherCAT, EtherNet/IP, Modbus/TCP, PROFINET IRT, PROFIBUS DP-V1, POWERLINK
Galvanic isolation	500 V DC between the current paths	Interface	u-remote system bus
Module type	Functional module	Transmission speed of system bus, max.	48 Mbit

## Classifications

ETIM 6.0	EC001604	ETIM 7.0	EC001604
ECLASS 9.0	27-24-26-08	ECLASS 9.1	27-24-26-08
ECLASS 10.0	27-24-26-08	ECLASS 11.0	27-24-26-08

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### Approvals

Approvals

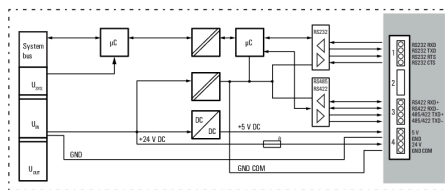


ROHS	Conform
UL File Number Search	E141197

### Downloads

Approval/Certificate/Document of Conformity	<a href="#">Declaration of Conformity</a> <a href="#">Lloyds Register certificate</a> <a href="#">DNV/GL certificate</a> <a href="#">ABS certificate</a> <a href="#">RINA certificate</a> <a href="#">Bureau Veritas - Type Approval Certificate</a> <a href="#">PRS (Polish Register of Shipping)</a> <a href="#">NIPPON KAIJI KYOKAI Certificate</a>
Engineering Data	<a href="#">STEP</a> <a href="#">CoDeSys - Version 3</a> <a href="#">Rockwell - Studio5000</a> <a href="#">OMRON - Sysmac Studio</a>
Engineering Data	<a href="#">WSCAD, Zuken E3.S, EPLAN</a>
Product Change Notification	<a href="#">Release-Notes - Firmware</a>
Software	<a href="#">Current Firmware UR20-1COM-232-485-422</a> <a href="#">Archiv Firmware UR20-1COM-232-485-422</a>
User Documentation	<a href="#">MAN_U-REMOTE_DE</a> <a href="#">MAN_U-REMOTE_EN</a>

**Block diagram**



**Connection diagram**

