Simple integration of devices with a serial interface
u-remote keeps your automation solutions flexible

In the field of industrial automation, there are still a large number of peripheral devices being used that communicate via serial point-to-point connections. Examples of these kinds of devices include handheld scanners or printers.

Connecting these devices to a fieldbus-based or Ethernet-based automation architecture requires the use of interfaces that transfer serial signals to bus protocols and vice versa. u-remote makes it really simple to integrate serially communicating devices into your automation architecture.

The universal communication module allows for the use of either an RS232, an RS485 or an RS422 interface, which helps simplify your system configuration. A 5-V power supply and a 24-V power supply are part of the module and do not need to get considered as a seperate function.
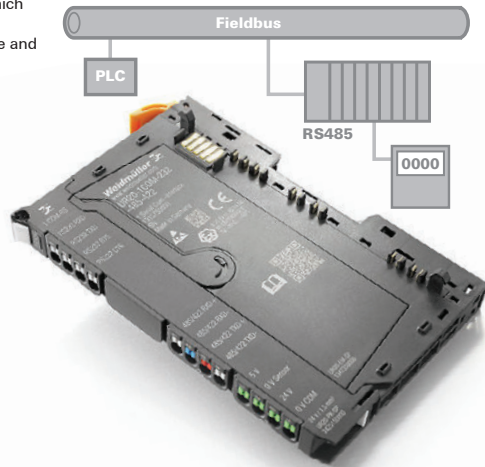
The new communication module from the u-remote range allows for the flexible integration of devices with serial interfaces into a modern industrial automation architecture

Option of retroactive adaptation
The integration of three standard interfaces with a parametrisable transfer rate allows you to respond to sudden changes in the device fleet. This is a useful feature if, for example, you are still unsure during the planning stage as to whether you are actually going to use any peripheral devices.

Simple diagnostics without the need for expensive software
LEDs on each channel and status indicators on the modules show whether the data transfer is working correctly or whether an error is present. This feature is a guarantee for reliable system start-up and rapid plant maintenance.

Your special advantages:

More flexibility, less complexity
The u-remote serial communication module combines three different interface types over a width of just 11.5 mm: RS232, RS485 and RS422. This enables different devices to be connected to the fieldbus or to the Ethernet network via just one module type. This makes planning work easier, reduces the amount of required space and also cuts costs.

Position special remote I/O functions decentrally within the field
FieldPower® enclosures bring the benefits of u-remote into the field

Reduction of project throughput times, minimisation of downtimes and promotion of ever more flexible production systems: all this leads to increased modularisation of machines and systems today.

The new FieldPower® IP54 enclosures for u-remote reliably bring the varied functionality of u-remote into the field. This gives you access to another module to increase the flexibility of your automation architecture.

In modern mechatronics, machine functions are becoming increasingly modular and developed beyond the boundaries of different trades. Combining the modular FieldPower® and u-remote system solutions allows even more individual solutions to be achieved.

In order to implement conveyor systems in intra-logistics and production logistics in line with quality, deadline and cost specifications, pre-assembled field boxes are required for the individual machine functions, which are type-tested and easy to combine and handle.

Supports quick and error-free installation in the field
The folding cable seal in combination with slit cable-seal inserts allows the use of pre-assembled M8 and M12 conductors in combination with u-remote connectors or complete connecting lines for whole modules.

Same components - reduced stock
The same IP20 I/O modules can be used which are already in use in other parts of the plant.

Your special advantages:

Perfect-fit remote I/O configuration in IP54
All functions available via u-remote can be arranged protected from dust and water in the new FieldPower® IP54 enclosure and installed decentrally in the field.

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You will find technical information and ordering data online on our innovations platform: www.weidmueller.com/best-connections

Weidmüller 25

1COM-232-485-422

UR20-1COM-232-485-422

- Interface for RS232, RS485 and RS422 peripherals
- Adjustable transfer rate
- Galvanic isolation of the signals in the module
- Separate power supply for external peripheral to the module

Technical data

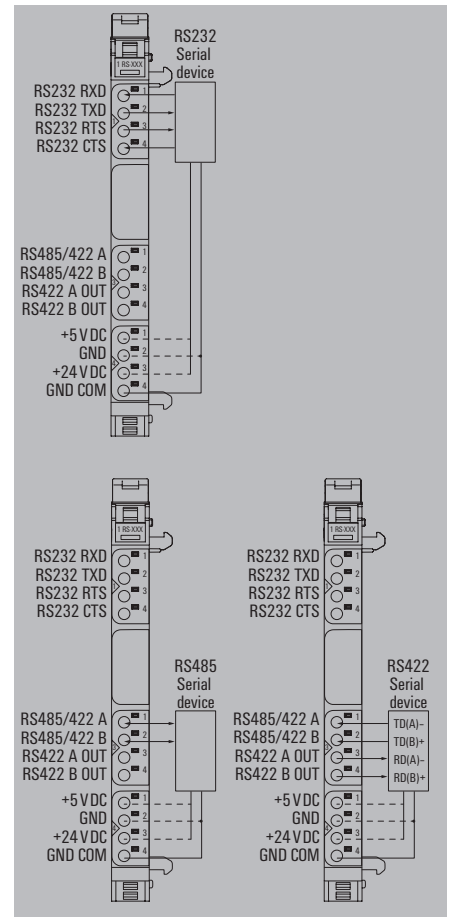| System data	
Interface	u-remote system bus
Transmission rate of system bus	48 Mbps
Galvanic isolation	DC 500 V between current paths
Supply	
Voltage supply	24 V DC +20 % / -15 % via the system bus
Current consumption (I_{IN} in power segment of field bus coupler), typ.	8 mA
Current consumption (I_{IN} in the respective power segment)	50 mA + load
RS Interface	
Number	1
Connection	1x RS232 / 1x RS485/422
Transmission rate	configurable, 300... 115200 Bit/s
Supply voltage	5 V / 24 V
Output current Supply voltage, max.	0.5 A
RS232 standards	DIN 66020, DIN 66259, EIA-RS 232C, CCITT V.24/V.28
RS485/422 standards	DIN 66259 Part 1 and 3, EIA-RS422/485, CCITT V.11
Short-circuit-proof	yes
Module diagnosis	yes
Individual channel diagnosis	yes
General data	
Weight	92 g
Dimensions (H/W/D)	120 mm (with catch lever 128 mm) x 11.5 mm x 76 mm

Ordering data

Module variants		
	Type	**Qty.** **Order No.**
RS232/RS485/RS422 communication module	UR20-1COM-232-485-422	1 **1315750000**

Accessories

	Type	Qty.	Order No.
Coding elements	KOSM BHZ5.00	100	**1483050000**
Termination kit	UR20-EBK-ACC	5	**1346610000**
Swivel marker	UR20-SM-ACC	20	**1339920000**
Connection marker for pusher custom printing	PM 2.7/2.6 MC SDR	192	**1323700000**
Connection marker for pusher neutral	PM 2.7/2.6 MC NE WS	960	**1323710000**
Module marker for custom printing	DEK 5/8-11.5 MC SDR	100	**1341610000**
Module marker for neutral	DEK 5/8-11.5 MC NE WS	500	**1341630000**
Thermotransfer version (Material: Polyester)	THM UR20 GE *[1]	1	**1429910000**
Thermotransfer version (Material: Polyester)	THM UR20 WS *[1]	1	**1429420000**
Paper version for Laserprinter	ESO UR20 DIN A4 WS *[2]	10	**1429430000**
Replacement parts			
Electronics module	UR20-EM-1315750000-SP	1	**1347350000**
Basic module	UR20-BM-SP	5	**1350930000**
Plug-in connector unit	UR20-PK-1315750000-SP	5	**2425150000**
Note			

*[1] 1 roll = 1000 label = 1 Qty.
*[2] 1 sheet = 60 label = 1 Qty.

RS232
Serial
device

RS232 RXD
RS232 TXD
RS232 RTS
RS232 CTS

RS485/422 A
RS485/422 B
RS422 A OUT
RS422 B OUT
+5 V DC
GND
+24 V DC
GND COM

RS232 RXD
RS232 TXD
RS232 RTS
RS232 CTS

RS485
Serial
device

RS485/422 A
RS485/422 B
RS422 A OUT
RS422 B OUT
+5 V DC
GND
+24 V DC
GND COM

RS232 RXD
RS232 TXD
RS232 RTS
RS232 CTS

RS422
Serial
device

RS485/422 A
RS485/422 B
RS422 A OUT
RS422 B OUT
+5 V DC
GND
+24 V DC
GND COM

TD(A)-
TD(B)+
RD(A)-
RD(B)+

Product standard	IEC 61131-2
EMC (in preparation)	EN 61000
ATEX (in preparation)	EN 60079
UL (in preparation)	UL 61010-2-201
MSIP (in preparation)	MSIP-REM-WMG-1315750000

Let's connect.