

CONV485USB-I, CONV485USB

RS-485 ↔ USB converters



- CONV485USB-I: converter with galvanic separation
- CONV485USB: converter without galvanic separation (for service purpose)
- RS-485 standard to USB conversion
- RS-485 port (up to 115.2 kbps baud rate)
- Supplying from USB port
- Line length up to 1200 m
- 3 (CONV485USB) or 4 (CONV485USB-I) LEDs for operation indication and data transmission signalization
- Easy installation on PC
- Can be mounted on standard TS-35 rail (CONV485USB-I)
- The set includes a USB cable (A/B type) with a length of 1.8 meters

CONV485USB-I and CONV485USB are modern, simple converters which allow connecting devices with RS-485 port to computers with a USB port.

After proper installation of the converter and Virtual COM PORT drivers user is able to use software which is using communication ports COM (used as RS-232 serial port in old systems).

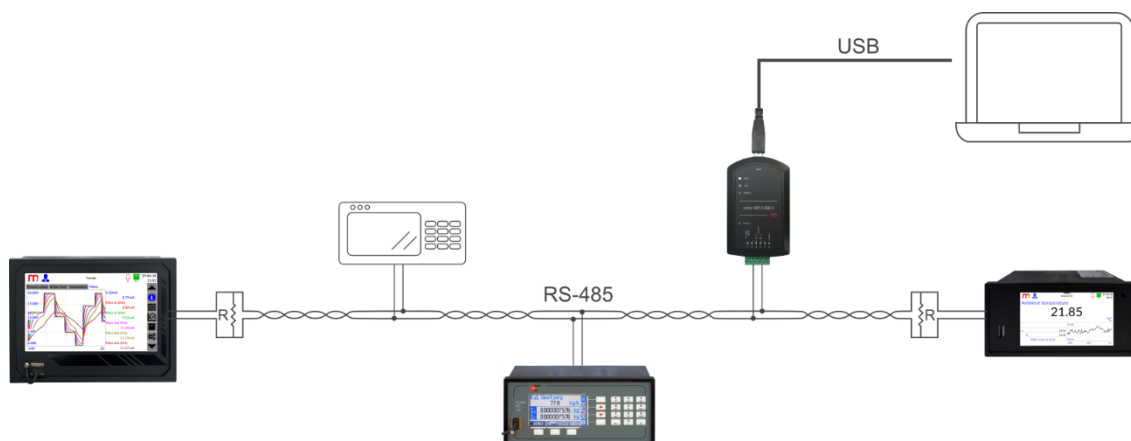
On RS-485 side may be connected up to 32 devices (according to RS-485 standard).

Converter is dedicated to work inside buildings or in control cabinets. CONV485USB-I can be mounted on TS-35 rail due to delivered handles.

APPLICATIONS

- Connecting devices with RS-485 port to PC
- Device configuration through serial port, service purposes
- Data transmission in visualization systems

APPLICATION EXAMPLE



TECHNICAL SPECIFICATION

CONV485USB-I

USB

Standard	In compliance with USB 2.0
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RS-485

Baud rate	300 bps .. 115.2 kbps
Maximum number of transmitters / receivers	32
Differential output voltage (TxD)	5 V, for $R_L = \infty$; min. 1.5 V, for $R_L = 54 \Omega$
Short circuit current (TxD)	Max. 250 mA
Receiver input resistance (RxD)	12 k Ω
Minimum input voltage (RxD)	0.2 V
Acceptable voltage on A,B terminals	-7 .. +12 V (max)
Short-circuit protection	Yes
Line RS-485 terminating resistor	220 Ω +2x 390 Ω , external

Others

Power supply	From USB port
Rated current	Max. 350 mA (nominal work)
USB / RS-485 galvanic separation	500 VAC
Work temperature	0 .. +50 $^{\circ}\text{C}$
Store temperature	-20 .. +60 $^{\circ}\text{C}$
Dimensions (without terminals) l x w x h	93 mm x 57 mm x 21 mm
Weight	ca. 65 g

Operating system

For VCP (Virtual COM PORT Drivers)	Windows 10 (32, 64 bit), Windows 8/8.1 (32, 64 bit), Mac OS-X, Linux 3.2 and greater
For D2XX (USB Direct Drivers)	Windows 10 (32, 64 bit), Windows 8/8.1 (32, 64 bit), Mac OS-X, Linux 2.6 and greater

CONV485USB

USB

Standard	In compliance with USB 2.0
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RS-485

Baud rate	300 bps .. 230.4 kbps
Maximum number of transmitters / receivers	32 (limited line length and without terminating resistors)
Differential output voltage (TxD)	3.3 V for $R_L = \infty$; min.: 1.5 V for $R_L = 54 \Omega$
Receiver input resistance (RxD)	12 k Ω
Minimum input voltage (RxD)	0.2 V
Acceptable voltage on A,B terminals	-7 .. +12 V (max)
Short-circuit protection	Yes

Others

Intended use	For service purpose only
Power supply	From USB port
Rated current	35 mA (without load on RS-485 side)
USB / RS-485 galvanic separation	No
Work temperature	0 .. +50 $^{\circ}\text{C}$
Store temperature	-20 .. +60 $^{\circ}\text{C}$
Dimensions (without terminals) l x w x h	56 mm x 31 mm x 25 mm
Weight	ca. 25 g

Operating system

For VCP (Virtual COM PORT Drivers)	Windows 10 (32, 64 bit), Windows 8/8.1 (32, 64 bit), Mac OS-X, Linux 3.2 and greater
For D2XX (USB Direct Drivers)	Windows 10 (32, 64 bit), Windows 8/8.1 (32, 64 bit), Mac OS-X, Linux 2.6 and greater

Data sheet version: 190711 EN Device CONV485USB version: 2.5 Device CONV485USB-I version: 2.5