



- Reliable, bidirectional conversion from USB to RS485
- LED status displays
- Extreme robust against interference
- Extended temperature range -40 to +75 °C
- Power supply via USB port

WebCode **9787A**



The USB RS485 converter for Zone 2 and Class I, Div. 2 is designed to convert USB data into serial data for the RS485 bus. The USB RS485 converter is intended for installation in Zone 2 and Class I, Div. 2 and can be used for various applications. RS485 is a widespread fieldbus often used for service purposes. Since computers and other devices very rarely have an RS485 interface but frequently have USB ports, the missing interface can be produced with this device.

Technical Data

Explosion Protection

Application range (zones)	2 22
Ex interface zone	2
IECEX gas certificate	IECEX TUR 18.0038X
IECEX gas explosion protection	Ex ec IIC T4 Gc
ATEX gas certificate	TÜV 18 ATEX 8212 X
ATEX gas explosion protection	Ⓔ II 3 G Ex ec IIC T4 Gc
Certificates	ATEX (TUR), IECEX (TUR), Korea (KTL)
Ship approval	ABS, BVIS, EU RO MR (DNV), KR, LR

Electrical Data

USB connection	Type B socket X2, 5-pole
Number of USB ports	1
USB specification	USB 2.0
Max. USB conductor length	3 m
Strain relief USB	Protection from unintentional separation
RS485 connection	D-SUB DE-9 socket X1, 9-pole
Number of RS485 ports	1
RS485 specification	RS485
RS485 data rate	Max. 1.5 Mbps
EOL resistor RS485	Externally in the D-SUB plug connector (200 Ω)
Max. RS485 conductor length	400 m at 500 kbps 200 m at 1.5 Mbps 1200 m at 9.6 to 93.75 kbps 1000 m at 187.5 kbps

Auxiliary Power

Power supply connection	Via USB port
Auxiliary power nominal voltage	5 V DC (4.5 to 5.5 V)

Auxiliary Power

Current consumption	50 mA
Max. power consumption	250 mW
Max. power dissipation outputs	150 mW
Polarity reversal protection	Yes, mechanical
Surge voltage category	I to USB in accordance with DIN EN 60664, III to RS485 in accordance with DIN EN 60664
Bypassing in the event of a voltage failure	None, in accordance with EN 61000-4-11

Galvanic Isolation

Test voltage for galvanic separation	Acc. to standard EN 60950-1
Auxiliary power/system components	≥ 1500 V AC

Device Specific Data

RS485 tightening torque	0.5 – 0.6 Nm
Drivers computer software	can be obtained at http://www.fdtichip.com/FTDrivers - Virtual COM Port (VCP)
Power RS485 LED	"RS485" LED, green
Power USB LED	"USB" LED, green
LED Receive RS485 to USB	"RX" LED, yellow
LED Transmit RS485 to USB	"TX" LED, yellow

Ambient Conditions

Ambient temperature	-40°C ... +75°C
Ambient temperature	-40°F ... +167°F
Storage temperature	-40°C ... +80°C
Max. operating altitude	< 2000 m
Max. relative humidity	95% (without condensation)

Mechanical Data

IP degree of protection (IEC 60529)	IP30
Module enclosure	PA 6.6
Fire resistance (UL 94)	V0
Pollutant class	Corresponds to G3
Width	17.6 mm
Depth	114.5 mm
Length	111.1 mm
Weight	0.17 kg
Weight	0.37 lb

Mounting / Installation

Mounting orientation	Vertical Horizontal
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Network Technology

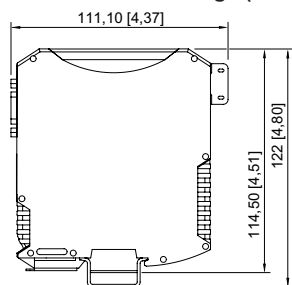
Network technology USB RS485 converter

For Zone 2

9787/15-11-11 Art. No. 266011



Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



Accessories

USB cable Type A to Type B



Cable type: USB 2 5-pole with shielding
Colour (sheath): black
Connector plug USB A to USB B; Length: 3000 mm

Art. No.

266833

Sub-D plug + PG interface



9-pole for connection of fieldbus or Servicebus to CPU & power module type 9440/15 and fieldbus isolatingrepeater 9185.
The end-of-line resistor is installed and switchable. For non-intrinsically safe RS-485.

Art. No.

105715

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.