

Bluetooth converter - PSI-WL-RS232-RS485/BT/HL - 2313795

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Bluetooth convertor, wireless transmission: RS-232/RS-422/RS-485 2-wire, mounting on EN DIN rails, MCX connection for external antenna, integrated path diagnostics: bar graph, UL-HazLoc approval

Why buy this product

- ✓ Local configuration via USB interface without separate power supply unit
- ✓ Multipoint with up to seven slaves
- ✓ Suitable for worldwide use thanks to adjustable transmission power (-28 ... 14 dBm)
- ✓ Secure and tamper-proof data transmission thanks to password protection, encryption, plus fixed and invisible device pairing
- ✓ Wireless path diagnostics using integrated bar graphs and 2 digital outputs
- ✓ Coexistence with other wireless systems due to the adaptive frequency hopping (AFH) method
- ✓ Installation of parallel wireless paths by cross-wiring 24 V DC and RS-485
- ✓ Point-to-point
- ✓ Can be used for RS-232/RS-422/RS-485 2-wire interfaces up to 187.5 kbps
- ✓ Transceiver for distances of up to 150 m
- ✓ UL HazLoc approval



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 579827
GTIN	4046356579827

Technical data

Dimensions

Width	22.5 mm
Height	99 mm
Depth	116 mm

Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
---------------------------------	------------------

Bluetooth converter - PSI-WL-RS232-RS485/BT/HL - 2313795

Technical data

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
Altitude	5000 m (For restrictions see manufacturer's declaration)
Degree of protection	IP20
Noise immunity	EN 61000-6-2:2005

General

Electrical isolation	VCC // Bluetooth, RS-232, RS-422, RS-485, USB
Test voltage data interface/power supply	1.5 kV AC (50 Hz, 1 min.)
Standards/regulations	FCC Part 15.247 / ISC RSS 210
Electromagnetic compatibility	Conformance with R&TTE directive 1999/5/EC
Noise emission	EN 55011
Net weight	196.6 g
Housing material	PA 6.6-FR
Color	green
MTBF	1153 Years (Telcordia standard, 25°C temperature, 21% operating cycle (5 days a week, 8 hours a day))
	262 Years (Telcordia standard, 40°C temperature, 34.25% operating cycle (5 days a week, 12 hours a day))
MTTF	2115 Years (SN 29500 standard, temperature 25 °C, operating cycle 21 % (5 days a week, 8 hours a day))
	850 Years (SN 29500 standard, temperature 40 °C, operating cycle 34.25 % (5 days a week, 12 hours a day))
	346 Years (SN 29500 standard, temperature 40 °C, operating cycle 100 % (7 days a week, 24 hours a day))
Conformance	CE-compliant
UL, USA/Canada	Class I, Zone 2, AEx nA IIC T6
	Class I, Zone 2, Ex nA IIC T6 Gc X
	Class I, Div. 2, Groups A, B, C, D
	cULus listed UL 508
Wireless licences	Belgium
	Bulgaria
	Denmark
	Germany
	Estonia
	France
	Finland
	Greece
	Great Britain
	Italy
Ireland	
Iceland	

Bluetooth converter - PSI-WL-RS232-RS485/BT/HL - 2313795

Technical data

General

	Liechtenstein
	Lithuania
	Luxembourg
	Latvia
	Malta
	Netherlands
	Norway (The device may not be operated within 20 km of Ny Ålesund town center.)
	Austria
	Poland
	Portugal
	Romania
	Sweden
	Switzerland
	Slovakia
	Slovenia
	Spain
	Czech Republic
	Turkey (The device may only be operated with Phoenix Contact antennas in accordance with the "Short Range Radio Devices (SRD) Regulations" Gazette No. 26464 dated March 16, 2007.)
	Hungary
	USA
	Cyprus (rep.)
	Belarus (Maximum transmission power of 25 mW (14 dBm) outside of buildings)

Power supply

Nominal supply voltage	24 V DC \pm 20 % (as an alternative or redundant, via backplane bus contact and system current supply)
Supply voltage range	10 V DC ... 30 V DC (via pluggable COMBICON screw terminal block)
	19 V AC ... 29 V AC (50/60 Hz)
Typical current consumption	100 mA (24 V DC)

Serial interface

Interface 1	V.24 (RS-232) interface in acc. with ITU-T V.28, EIA/TIA-232, DIN 66259-1
Interface	RS-232
Connection method	D-SUB 9 plug
File format/coding	Serial asynchronous UART/NRZ, 7/8 data, 1/2 stop, 1 parity, 10/11-bit character length
Transmission length	\leq 15 m
Pin assignment	DCE (Data Communication Equipment)

Bluetooth converter - PSI-WL-RS232-RS485/BT/HL - 2313795

Technical data

Serial interface

Data flow control/protocols	Software handshake, Xon/Xoff, or hardware handshake RTS/CTS, 3964 compatible
Serial transmission speed	1.2; 2.4; 4.8; 7.2; 9.6; 19.2; 31.25; 38.4; 57.6; 75; 93.75; 115.2 kbps
Interface 2	RS-422 interface in acc. with ITU-T V.11, EIA/TIA-422, DIN 66348-1
Interface	RS-422
Connection method	Pluggable screw connection
Transmission length	≤ 1200 m
Termination resistor	390 Ω (configurable)
	180 Ω
	390 Ω
Serial transmission speed	1.2; 2.4; 4.8; 7.2; 9.6; 19.2; 31.25; 38.4; 57.6; 75; 93.75; 115.2; 136; 187.5 kbps
Interface 3	RS-485 interface, in acc. with EIA/TIA-485, DIN 66259-4/RS-485 2-wire
Interface	RS-485 2-wire
Connection method	Pluggable screw connection
File format/coding	Serial asynchronous UART/NRZ, 7/8 data, 1/2 stop, 1 parity, 10/11-bit character length
Transmission length	≤ 1200 m
Termination resistor	390 Ω (configurable)
	180 Ω
	390 Ω
Data flow control/protocols	Automatic control
Serial transmission speed	1.2; 2.4; 4.8; 7.2; 9.6; 19.2; 31.25; 38.4; 57.6; 75; 93.75; 115.2; 136; 187.5 kbps
Interface 4	USB 2.0
Interface	USB
Connection method	Mini-USB B, socket

Radio interface

Interface description	Bluetooth 2.1 + EDR
Frequency range	2.402 GHz ... 2.48 GHz (ISM bandwidth)
Transmission method	1.6 kHz (FHSS)
Channel distance	1 MHz
Transmit capacity, minimum	0 dBm
Transmit capacity, maximum	14 dBm (Outside of Europe, adjustable via software)
	10 dBm (Europe, can be set via software)
	10 dBm (Default setting, adjustable)
Minimum receiver sensitivity	-91 dBm
Antenna	External
Connection method	MCX socket
Bluetooth Multidrop master/slave	1/7

Digital outputs

Bluetooth converter - PSI-WL-RS232-RS485/BT/HL - 2313795

Technical data

Digital outputs

Output name	Digital outputs
Number of outputs	2
Connection method	COMBICON plug-in screw terminal block

Standards and Regulations

Electromagnetic compatibility	Conformance with R&TTE directive 1999/5/EC
Type of test	Free fall in acc. with IEC 60068-2-32
Test result	1 m
Type of test	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6
Test result	5g, 10...150 Hz, 2.5 h, in XYZ direction
Type of test	Shock in acc. with EN 60068-2-27/IEC 60068-2-27
Test result	15g, 11 ms period, half-sine shock pulse
Noise emission	EN 55011
Noise immunity	EN 61000-6-2:2005
Free from substances that could impair the application of coating	according to P-VW 3.10.7 57 65 0 VW-AUDI-Seat central standard
Standards/regulations	EN 61000-4-2
Contact discharge	± 6 kV
Standards/regulations	EN 61000-4-3
Frequency range	80 MHz ... 3 GHz
Standards/regulations	EN 61000-4-4
Comments	Criterion B
Standards/regulations	EN 61000-4-5
Signal	± 1 kV
Standards/regulations	EN 55032
	EN 61000-4-6
	FCC Part 15.247 / ISC RSS 210
Conformance	CE-compliant
UL, USA/Canada	Class I, Zone 2, AEx nA IIC T6
	Class I, Zone 2, Ex nA IIC T6 Gc X
	Class I, Div. 2, Groups A, B, C, D
	cULus listed UL 508

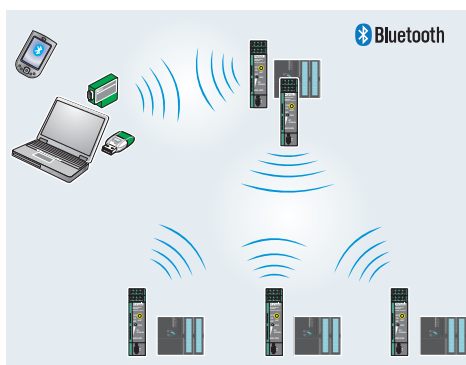
Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Bluetooth converter - PSI-WL-RS232-RS485/BT/HL - 2313795

Functional drawing



Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
-----------	--	---	---------------

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
------------	--	---	---------------

cULus Listed			
--------------	--	--	--

Phoenix Contact 2017 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>