

Wireless module - RAD-80211-XD/HP-BUS - 2900047

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High power WLAN wireless transceiver (transmitter and receiver) with Ethernet, RS-232, RS-485/RS-422 interface and bus foot for use in I/O extension modules, for 2400 MHz ISM band

Your advantages

- ✓ Optional, integrated bus foot for connecting RAD-Line extension modules
- ✓ Provides an interface for data transmission between older serial devices (RS-232, RS-422, and RS-485 interfaces) and an Ethernet network
- ✓ Using the integrated web browser interface, the devices can be configured as an access point, bridge or client
- ✓ Can be used as a Modbus RTU/TCP gateway
- ✓ In bridge mode, up to 40 nodes can be connected to a single network, creating a reliable wireless network
- ✓ Provides an industrial 400 mW wireless transceiver
- ✓ Operates in the license-free 2.4 GHz ISM band
- ✓ Supports TCP/IP, UDP, and IPv4 protocols
- ✓ High level of security with 128/192/256-bit AES encryption according to 802.11i and optional 802.1x authentication can be set
- ✓ Can be programmed for point-to-point, point-to-multipoint, and multipoint-to-point configurations



Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| GTIN |  4 046356 461573 |
| GTIN | 4046356461573 |
| Weight per Piece (excluding packing) | 295.000 g |
| Custom tariff number | 85176200 |
| Country of origin | Canada |

Technical data

Dimensions

Wireless module - RAD-80211-XD/HP-BUS - 2900047

Technical data

Dimensions

| | |
|--------|--------|
| Width | 45 mm |
| Height | 99 mm |
| Depth | 115 mm |

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (operation) | -40 °C ... 70 °C |
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Degree of protection | IP20 |

Wireless set

| | |
|--------------|---------------|
| Set contents | 1 transceiver |
|--------------|---------------|

Wireless path

| | |
|--------------------|---------------------------|
| Direction | Bi-directional |
| Frequency range | 2.4032 GHz ... 2.4799 GHz |
| Transmission power | 400 mW |

Serial interface

| | |
|-----------------------------|---------------------------------------|
| Designation | RS-232 |
| Data rate | 300 ... 57,6 kBit/s |
| Connection method | D-SUB-9 female connector |
| File format/coding | Asynchronous |
| Data flow control/protocols | RTS/CTS |
| Designation | RS-485/RS-422 |
| Data rate | 300 ... 57,6 kBit/s |
| Connection method | COMBICON plug-in screw terminal block |

Supply

| | |
|-----------------------------|---------------------|
| Supply voltage | 24 V DC |
| Supply voltage range | 12 V DC ... 30 V DC |
| Typical current consumption | 230 mA (24 V DC) |
| Max. current consumption | 500 mA (12 V DC) |
| Nominal power consumption | 5.52 W |

General

| | |
|-----------------------|--|
| Mounting position | any |
| Assembly instructions | on standard DIN rail NS 35 in accordance with EN 60715 |
| Housing material | Polyamide PA non-reinforced |

Standards and Regulations

| | |
|-------------|----------------------------|
| Conformance | FCC Directive, Part 15.247 |
|-------------|----------------------------|

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Technical data

Standards and Regulations

| | |
|----------------|------------------------------------|
| | ISC Directive RSS 210 |
| UL, USA/Canada | Class I, Div. 2, Groups A, B, C, D |

Connection data

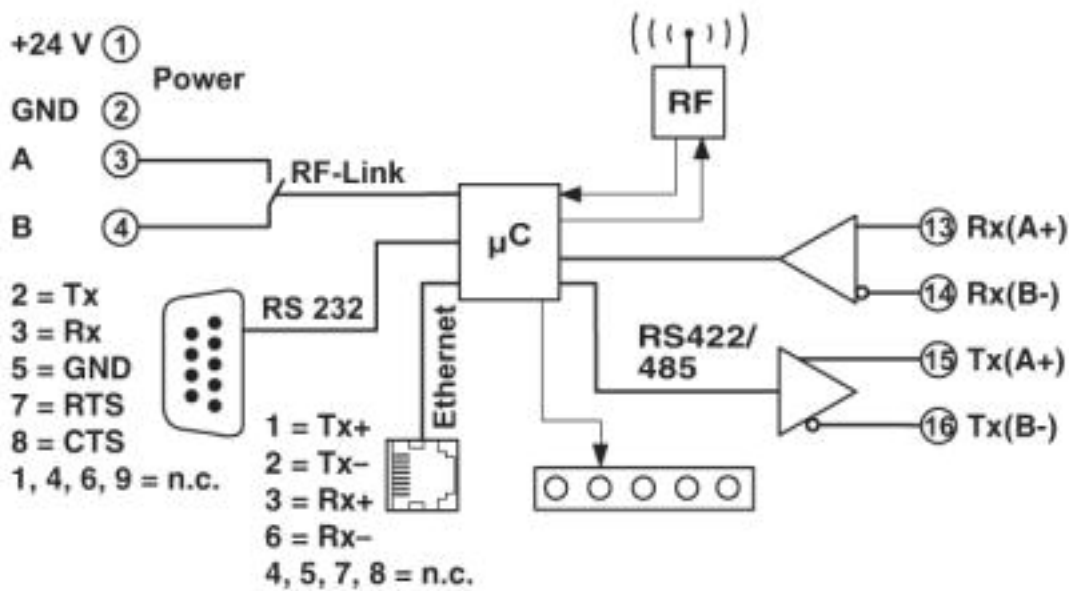
| | |
|---------------------------------------|------------------|
| Conductor cross section solid min. | 0.2 mm² |
| Conductor cross section solid max. | 4 mm² |
| Conductor cross section flexible min. | 0.2 mm² |
| Conductor cross section flexible max. | 2.5 mm² |
| Conductor cross section AWG min. | 24 |
| Conductor cross section AWG max. | 14 |
| Connection method | Screw connection |
| Stripping length | 8 mm |
| Screw thread | M3 |

Environmental Product Compliance

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

Drawings

Block diagram



Wireless module - RAD-80211-XD/HP-BUS - 2900047

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 19179290 |
| eCl@ss 4.0 | 27250300 |
| eCl@ss 4.1 | 27250300 |
| eCl@ss 5.0 | 27242200 |
| eCl@ss 5.1 | 27242200 |
| eCl@ss 6.0 | 19179200 |
| eCl@ss 7.0 | 19179290 |
| eCl@ss 8.0 | 19179290 |
| eCl@ss 9.0 | 19179290 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC000310 |
| ETIM 3.0 | EC000310 |
| ETIM 4.0 | EC000310 |
| ETIM 5.0 | EC000310 |
| ETIM 6.0 | EC000310 |
| ETIM 7.0 | EC000310 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211506 |
| UNSPSC 7.0901 | 43223108 |
| UNSPSC 11 | 39121008 |
| UNSPSC 12.01 | 43223108 |
| UNSPSC 13.2 | 43222604 |
| UNSPSC 18.0 | 43222604 |
| UNSPSC 19.0 | 43222604 |
| UNSPSC 20.0 | 43222604 |
| UNSPSC 21.0 | 43222604 |

Accessories

Accessories

Antenna

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Accessories

Antenna - RAD-ISM-2400-ANT-OMNI-2-1 - 2867461



Omnidirectional antenna, 2.4 GHz, gain: 2 dBi, polarization: linear, opening angle: h/v 360°/75°, degree of protection: IP65, connection: MCX (male), incl. 1.5 m / 5 ft. connecting cable and mounting bracket for wall mounting

Antenna - RAD-ISM-2400-ANT-VAN- 3-1-MCX - 2885702



Omnidirectional antenna with protection against vandalism, 2.4 GHz, gain: 3 dBi, polarization: linear, opening angle: h/v 360°/85°, degree of protection: IP55, connection: MCX (male), for control cabinet mounting (optional wall mounting), incl. 1.5 m / 5 ft. connecting cable

Antenna - RAD-ISM-2400-ANT-OMNI-9-0 - 2867623



Omnidirectional antenna, 2.4 GHz, gain: 9 dBi, polarization: linear, opening angle: h/v 360°/15°, degree of protection: IP65, connection: N (female), incl. mounting bracket and mast clips

Antenna - RAD-ISM-2400-ANT-PAN- 8-0 - 2867610



Directional antenna, 2.4 GHz, gain: 8 dBi, polarization: linear, opening angle: h/v 75°/70°, degree of protection: IP55, connection: SMA (female), incl. mounting bracket and mast clips

Antenna - RAD-ISM-2400-ANT-PAR-19-0 - 2867885



Directional antenna, 2.4 GHz, gain: 19 dBi, polarization: linear, opening angle: h/v 17°/11°, degree of protection: IP65, connection: N (female), incl. mounting bracket and mast clips

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Accessories

Antenna - RAD-ISM-2400-ANT-OMNI-6-0 - 2885919



Omnidirectional antenna, 2.4 GHz, gain: 6 dBi, polarization: linear, opening angle: h/v 360°/30°, degree of protection: IP67, seawater-resistant, connection: N (female), incl. mounting bracket and mast clamps, ATEX and IECEx approval

Configuration set

Configuration set - RAD-ISM-2400-DATA-CONFIG-KIT - 2885838



Configuration set, consisting of configuration software RAD Link 3.1, Quick Start Guide and User Manual in printed form and interface cable (D-SUB 9 to USB)

Solar set

Solar system - RAD-SOL-SET-24-100 - 2885472



24 V / 100 Wp solar system for worldwide use. Consisting of a solar panel, prewired control cabinet with charge controller, solar batteries, fuses, surge protection and assembly material (including mast clips).