



TeamWare Wireless Sensor Network

Wireless device bridge Modbus/RTU

General Features

- Bridge between third-party Modbus devices and TWSN radio network (bridge function between TWSN gateway and Modbus devices)
- Modbus/RTU protocol usage on physical layer RS232
- TWSN repeater function
- Powered with 48 Vdc mains
- External radio antenna

TWSN-232 is a radio device powered with 48 Vdc mains with function of connecting, via the TWSN radio network, one or more third-party Modbus devices having RS232 interface to the TWSN gateway.

TWSN-232 allows to exchange information with Modbus devices without any wired connection; consequently it works as a bridge, creating a wireless connection between TWSN gateway and Modbus devices.

The device can also work as a repeater to other radio devices.

Technical specifications

User interface

- Button to join / unjoin to the network
- 7 segments led digit to view TWSN join status and radio link level with other radio sensors

Radio module specification

- Band: ISM 2.4GHz
- RF Data rate: 250 Kbps
- Reception sensitivity: -102 dBm
- Max transmission power: 10 mW (+10 dBm)
- External antenna
- Indoor/Outdoor coverage: 50m/100m
- Standard: IEEE 802.15.4-2003; Stack ZigBee 2007 PRO (EMBER Znet)
- Network Security: ZigBee-2007 standard security requirements; 128 bit AES encryption algorithm

Power supply

- Power Supply: 48 Vdc, 20mA

Environmental and mechanical parameters

- Operating temperature: -10°C .. +60°C
- Storage temperature: -20°C .. +70°C
- Protection degree: IP54
- Size: 145x90 mm

Product standards applied

- ETSI EN 300 328: radio compatibility for digital transmissions
- ETSI EN 301 489: radio compatibility
- EN 61000-6-2/3: EMC Emissions/Immunity
- EN 60950-1: electric safety

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