



TeamWare Wireless Sensor Network

TCP/IP gateway for TWSN Radio Network

General features

- Coordinator function for TWSN Radio Network
- Data hub for all radio sensors
- Ethernet interface between external environment and TWSN Network
- Supported network protocols: TCP/IP, FTP, UDP, SNMP, Modbus
- RS232 serial interface configurable for GSM / GPRS / UMTS connection (external modem)
- RF power 10mW
- Powered with 230 Vac
- External radio antenna

TWSN-TCP/IP GW is part of TWSN family and it performs the task of gateway. It interfaces with a Personal Computer through an Ethernet interface in order to manage the radio network of TWSN family devices.

Within wireless section, TWSN-TCP/IP acts as coordinator device with an active part in network creation and in the maintenance of radio traffic among similar devices. The measurements coming from radio devices are stored internally in text files, even for long periods (i.e. 1 month).

The device connected to a management center can operate both as client and as server. It is powered externally with 230 Vac.

Technical specifications

User interface

- Button to associate / disassociate to node
- 7 segments bar led to view TWSN join status and radio link level with other radio sensors
- Ethernet TCP/IP activity and link led
- Power status led

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

Communication ports

- Ethernet port: 10baseT with RJ45 connector
- Serial port: RS232

Power supply

- Supply: 230 Vac, 50/60Hz, 20mA

Environmental and mechanical parameters

- Operating temperature: -10°C .. +60°C
- Storage temperature: -20°C .. +70°C
- Protection degree: IP30
- Size: 145x130 mm

Product standards

- 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: EMC electrical safety

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