



## TeamWare Wireless Sensor Network

## Wireless device for message repetition

TWSN-ZR

### General features

- Repeater between devices with poor or absent radio connection
- TWSN network routing function
- Powered with 230 Vac
- External radio antenna

TWSN-ZR is a radio device powered at 230 Vac which has the function of managing the radio network routing, extending the radio range of peripheral devices and allowing to overcome long distances or obstacles.

The device only needs a connection to a 230 Vac power supply.

### 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

#### Radio module specification

- Band: ISM 2.4GHz
- Channels used: 11-24
- 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

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

### Environmental and mechanical parameters

- Operative temperature: -10°C .. +60°C
- Storage temperature: -20°C .. +70°C
- Protection degree: IP54
- Size: 145x90 mm
- Mounting: wall with screws

### 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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