WB169-SI2-P-EX

USAGE

The pulse sensor is designed to read data from power meters
with pulse outputs (water meters, electricity meters, gas meters) or binary
sensors (door contacts, flood sensors) and for radio transmission of the sensed data using 169 MHz Wireless M-Bus radio technology.

UNIT DESCRIPTION

The sensor is equipped with two inputs for reading measurement pulses from connected power meters or for monitoring the status of binary
The sensor stores data from the connected meters and sends it to the central data acquisition system at set regular intervals
via a communication gateway. Changes in the status of the binary sensors are fed into the
to the central system immediately. Wireless data transmission is implemented in the 169 MHz radio band of the wM-Bus transmission technology.

TECHNICAL PARAMETERS

Wireless interface

- Frequency Band: 169,400 - 169,475 MHz
- Wireless Technology: Wireless M-Bus
- Protocols: wM-Bus
- Modulation: 2-GFSK, 4-GFSK
- Channel Width: 12.5 or 50 kHz
- Transmission Power: 500 mW

- Receiver Sensitivity: - 109 dBm
- Data Rate: 2,4 - 19,2 kBd
- Output Impedance: 50 Ω
- Antenna: external, SMA-female connector

Power

- Battery: Li-SOCI2
- Battery Capacity: 13 Ah
- Battery Life: 5 years

Physical Properties

- Length: 190 mm
- Width: 75 mm
- Height: 75 mm
- Weight: 300 g

Operating Conditions

- Operating Temperatures: (-20 to +50) ^{0}C
- Storage Temperatures: (0 to +40) ^{0}C
- Relative Humidity: 90% (non-condensing)
- IP Rating: IP65

Pulse input

- Open Switch Resistance: greater than 5 MΩ
- Closed Switch Resistance: less than 10 kΩ
- Max Voltage in Closed State: 0,25 V
- Max Input Pulse Frequency: 300 Hz
- Min Pulse Length: 1 ms

UART configuration

- UART Data Rate: 9.6 kbps
- Transmission method: Asynchronous
- UART parameters: 8 data bits, 1 stop bit, no parity
- Voltage Level: 3.6 V (CMOS)

Certification

- ATEX: II 3G Ex ic IIA T4 Gc