



## Holosys Wireless M-Bus PulseReader WP1 ATEX

Holosys Wireless M-Bus PulseReader **WP1 ATEX** is a radio module used for collecting meter consumption readouts specifically designed for ATEX scenarios (gas, water, electrical energy, heating etc.). The module is capable of reading meters equipped with pulse outputs. The Wireless M-Bus communication protocol ensures compatibility with a wide range of metering equipment.



Wireless M-Bus in accordance with EN 13757- 4



Operating Frequency 868 MHz



Compatible with utility meters that have pulse outputs



Intended for use in potentially explosive environments

- Battery lifetime: up to 15 years
- Radio range: up to 800 meters
- Protection type: IP68
- Operating temperature: -20°C .. 80°C
- Periodical sending of Wireless M-Bus radio packets for transferring meter readouts
  - AES128 encryption of radio telegrams to protect message content
    - Embedded Real-time clock
      - CBC-MAC (Cipher Block Chaining Message Authentication Code)

- Pseudorandom transmission of radio packets in order to avoid synchronous collision
  - Possible synchronization with battery-powered radio repeater
    - SENDING: stored counter values at a specifc time (Due Date function), manipulation alarm information (Tamper), low battery alarm, remaining battery lifetime in months
  - User configurable setting of counting impulses vs. value increment ratio.
  - Configuration using AES128 protected radio channel
- Possibility to change AES128 passwords





## **TECHNICAL CHARACTERISTICS**

Pulse input data	
Min. pulse duration (closed contact)	2 ms
Min. pause between pulses (open contact)	20 ms
Max. pulse frequency	45 Hz
Max. pulse frequency with 50% duty cycle	25 Hz
Contact voltage	2.5V3.6V
Contact current	4 μΑ
Contact resistance	1 ΜΩ
Radio interface	
Frequency	868.95 MHz
Antenna type	Internal
Data transmission rate	100Kchips
Standard	EN 13757-4
General data	
Power supply	Integrated battery
	Battery life time (25°C): ~15 years (depending on the configuration)
Housing	Material: Thermoplastic
	Dimensions (w x h x l): 77 x 77 x 35 mm
	Mounting: Bolts on the mountable surface
	Protection type: IP68
	Connecting cables length: ~1.5 m
Operating temperature range	-20°C+80°C
Weight	~230 g