



ADO868 wMBus

Characteristics:

Frequency: 868MHz (TI CC430F5137)
Output power: 10dBm
Receiver sensitivity: -97dBm
Antenna: 1/4 helix -3dBm
Range: 600-800m in open space
Power supply: LiSOC12 battery 3,6V, 2200 mAh
Average consumption: less than m15 A
Moisture protection: hermetically sealed casing (IP68)
Working temperature: -10oC to +65oC



ADO868Wmbus is a device designed for wireless reading of residential, industrial and combination water meters. The device has the integrated inductive sensors for direct installation on the water meter. The device is characterized by high output power. The operating frequency of the device is 868.95 MHz. The device is used for meter reading in standard and extreme conditions.

ADO868Wmbus device is suitable for installing in manholes and the range (depending on the manhole conditions) can be 10 m to 300 m around the manhole. In the cases of optical visibility the range of the device can exceed 1000 m. Reading is also possible from water-filled manholes.

ADO868Wmbus device offers the reading and transmission of the packets with information on direct and reverse flow, reading configuration and storing the status of certain dates, sending the information on leakage and pipe bursts alarms, and the alarm if the water meter has stopped working, the data on the battery status as well as tampering detection (removal of the module from the water meter).

ADO868Wmbus device has the option of encrypting the radio messages that can be defined by the user and the protection against unauthorized reading, the option to be configured via an encryption protected radio channel, protection against false representation of radio modules and/or changing the content, and an integrated RTC clock. The device is capable of radio packet transmission at pseudorandom intervals to avoid synchronous collisions. The reading software has the option to define the radio packets transmission interval and the capability of including the serial number of the water meter and transmitting that serial number in each radio message.

The device is powered by a 2200 mAh LiSOC12 battery specially designed for use in telemetry. The battery ensures 15 years of device secure functioning (in normal operating conditions, with up to 4 monthly readings).

High quality casing and silicone filling provide IP68 level of protection for electronic components within the module so that the device can function in all weather conditions and is fully protected against the influence of temperature, moisture and when immersed in water. Inductive sensors prevent the use of magnets for the purpose of misuse, i.e. device and reading interference.

ADO868Wmbus device can be read individually by the handheld terminal and has the option of group reading. By adding ADO Gateway, ADO Gsm Wmbus device and ADO Terminal, it is possible to fully automate the reading. The software allows periodical sending of Wireless M-Bus radio packets which transmit the meter status and additional information depending on the configuration, one way communication.

ADO868Wmbus device is manufactured in compliance with EN13757 European Standard (Wireless M-Bus, OMS). There is an option for servicing the device and replacing the battery.