



OrionM2M

# ORIONMETER

RADIO MODEM LoRaWAN

ORN-TWM-LW868

for **WATER METER**

Apator Powogaz Smart C+ R160



building  
connected future










 LoRa Alliance Member™

# ORIONMETER RADIO MODEM for water meter Apator Powogaz Smart C+ R160

The radio modem **ORIONMETER** for water meter Apator Powogaz Smart C+ R160, **which is connected without cables**, is used as a means of remote wireless data collection on the consumption of cold and hot water in apartments, individual houses, as well as in other residential and non-residential premises when commercial accounting of public utilities. The radio modem ORIONMETER (ORN-TWM-LW868) transmits the meter reading several times a day through the LoRaWAN network.

## BENEFITS

-  Lifetime without battery replacement from 7 years
-  Remote collection of indications
-  Protection from autopsy and interventions
-  Workability at temperatures up to 80-85° C
-  The tight case - degree of protection of IP65
-  Easy to install and maintain
-  Unique technology ORION FDM (Configurator) allows to reduce the time, costs for installation via USB RF tool

## RADIO FREQUENCY CHARACTERISTICS

Parameters	Value
Operating frequency, MHz	865-868(KZ) 863-870(RU) 863-870(EU)
Transmitter power (EIRP), mW	up to 25
Receiver sensitivity	-137 dBm
Data transfer rate, kbps	0,3...40
Communication range under conditions city building, km	up to 5
Communication range in visibility conditions, km	up to 15

## MAIN CHARACTERISTICS

Parameters	Value
Material	Polycarbonate
Maximum water consumption, m / h	3
Work temperature, ° C	+5...+85
Battery voltage, V	3,6
Nominal battery capacity, mA / h	2400
Battery Chemistry	Li-SOCl2
Lifetime without battery replacement, years	≥7
Autopsy report	Yes
Magnetic Notification	Yes
Determining the direction of water flow	yes
Mass (without counter), g	≤40
Overall dimensions, mm	63 x 31,5
Hourly archive, day	62

## ADVANTAGES AND APPLICATIONS

1	Autonomic meter in the standard casing
2	Simple and quick installation; archiving of data
3	Timely informing the dispatcher about the date of verification of the meter
4	The function of informing about accidents during the absence of the homeowner
5	Convenient balancing of balances, reduction of payment gaps
6	User's personal cabinet
7	Automated collection of indications in real time from housekeeping and housing energy meters on actual consumption
8	Elimination of the human factor (elimination of errors) when taking indications manually
9	Regular unloading of accumulated statistics of consumed energy resources in the database
10	Reduction of staff costs, transportation costs, unauthorized using of resources, etc .
11	Elimination of the possibility of abuse by users to submit knowingly false meter readings
12	Increase of energy efficiency of engineering systems of municipal and housing funds due to analytical data

