



OrionM2M

LoRaWAN module for water meter

ORIONMETER ORN-TWM

FEATURES:

-  LoRaWAN v1.0.3 Class A
-  Ultra-low power consumption
-  Rapid installation and deployment
-  EasyTool technology allows configure the device remotely
-  With BatteryCare® technology life time period is up to 10 years
-  Optical consumption detection
-  Magnetic field detection
-  Backflow and leakage information
-  Ultra-wide-distance transmission is up to 15 km
-  Non-volatile memory stores data



APPLICATIONS:

Utility – remote monitoring of resources | Smart building and Industrial Control | Smart Agriculture | Other wireless sensing applications

General

Enclosure material	PC
Mounting	To the water meter front panel
Consumption detection	Optical
Water flow activation and direction	Yes
Microcontroller	Ultra-low-power MCU STM32L0
Operating temperature, °C	+5 ... +85
Battery type	Li-SOCl2
Battery voltage, V	3.6
Battery capacity, mAh	2500
Battery life, year	up to 10
IP rating	IP65
Dimensions, mm	Ø65 x 35
Weight, g	≤40
Warranty operating period, months	36

Radio

Support Protocol	LoRaWAN v1.0.3
Device class	A
Bands	EU863-870 IN865-867 RU864-870 KZ865-868 US902-928 AU915-928 AS923 KR920-923
Activation in LoRaWAN	OTAA
LoRa Power Output	up to 14 dBm (25 mW)
Receiver sensitivity, dBm	up to -137
Signal lead	Internal antenna
Data transfer rate, kbps	0.3 ... 40
ADR support	Yes
Communication range, km	up to 15

Water meter compatibility list

Manufacturer	DIN	R100-H; R50-V / C	R160 – H; R63 – V / B
Apator powogaz	15	SMART+ JS 1,6-02 SMART+ JS90 1,6-02 SMART+ JS 2,5-02 SMART+ JS90 2,5-02	SMART C+ JS 1,6-02 SMART C+ JS90-1,6-02 SMART C+ JS2,5-02 SMART C+ JS90-2,5-02
	20	SMART+ JS 2,5-G1-02 SMART+ JS90 2,5-G1-02 SMART+ JS 4-02 SMART+ JS90 4-02	SMART C+ JS2,5-G1-02 SMART C+ JS90-2,5-G1-02 SMART C+ JS4-02 SMART C+ JS90-4-02
Teplovodomer	15	BCX-15-02 BCF-15-02	BCXH-15 BCFH-15
	20		BCXH-20 BCFH-20

Order Info

SKU	Description
ORN-TWM-CA/F	LoRaWAN module for water meter; 3.6V; 2500 mAh; IP65
	C: type · LW: LoRaWAN A: antenna · 868: internal 868Mhz · 915: internal 915Mhz F: the default frequency plan · EU: EU863-870 · IN: IN865-867 · RU: RU864-870 · KZ: KZ865-868 · US: US902-928 · AU: AU915-928 · AS: AS923 · KR: KR920-923