



OrionM2M

LoRaWAN Multifunction Device

ORIONMETER LA-IP

FEATURES:

- LoRaWAN v1.0.3 Class A and C
- Provides DC 9V to target devices
- Ultra-low power consumption
- Communicating RS-485/RS-232/M-BUS
- Rapid installation and deployment
- Ultra-wide-distance transmission is up to 15 km
- Non-volatile memory stores data
- EasyTool technology allows configure the device remotely
- External power AC230V (optional)
- With BatteryCare® technology life time period is up to 10 years



APPLICATIONS:

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

General

Enclosure material	PC
Microcontroller	Ultra-low-power MCU STM32L0
Number of inputs / output	3(4) / 1
Number of RS-485 or RS-232*	1
Number of MBUS**	1
Working temperature, °C	-40...+65
Battery type	Li-SOCL2
Battery V/mAh	3.6/3650
Power output to target, V/mA	9/>40
External power AC, V	90 – 265 (optional)
Battery life, year	up to 10
IP Rating	IP65(68*)
Weight, g	≤112
Warranty operating period, months	36

Radio

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

Order Info

SKU	Description
LA-IP[DICA0V]/S-F	LoRaWAN Multifunction Device ORIONMETER LA-IP 3(4) inputs; 1 optional output; battery 3.6V; 3650mAh
LA-IP-RSP[ICAP]/T-S-F	LoRaWAN Multifunction Device ORIONMETER LA-IP 3 inputs; battery 3.6V; 3650mAh / AC230V / DC 12-24V; RS485* / sensor / adapter
LA-IP-MBUS[CAV]/S-F	LoRaWAN M-BUS** Converter; battery 3.6V; 3650mAh

D: Inputs

- 0: 0 inputs
- -: 3 inputs
- 4: 4 inputs

I: IP rating

- -: IP65
- 68: IP68

C: type

- -: LoRaWAN

A: antenna

- -: internal 868
- 9: internal 915
- E: external SMA-female

P: power supply

- -: bat. 3.6V, 3650mAh
- A: external AC 230V
- D: external DC 12-24V

O: outputs

- -: no outputs
- 0: 1 output

V: shipping variant

- -: standard shipping
- W: without housing

T: external connections

- 0: no external connections
- S1: soil Moisture sensor
- S2: soil Temperature sensor
- S3: soil EC sensor
- S4: soil Moisture, Temp. & EC sensor
- S5: soil Nitrogen sensor
- S6: soil Phosphorus sensor
- S7: soil Potassium sensor
- S8: soil NPK sensor (Fertilizer)
- S9: soil Moisture, Temp., EC, salinity and NPK sensor
- R2: RS-232 adapter

S: Serial devices

- 01: Incotex Меркурий 230, 234
- 02: Incotex Меркурий 200.02, 200.04, 206
- 03: Energomera CE102M, CE301, CE302, CE303
- 04: Decast Metronic CTK «MAPC / NEO / NEO Y Teplovodohran ПУЛЬCAP / ПУЛЬCAP-K
- 06: Termotronic TB-7
- 07: VZLET TCPB-033 TCPB-034
- 10: Saiman OTAH CAP3Y-3712 / CAP4Y-3712
- 11: Saiman OPMAN CO-3711
- 12: Saiman ДАЛA CA4Y-3720 / CA4-3720
- 13: Saiman OPMAN COAP-3717
- 14: Basic Modbus
- 15: Mirtek-12, Mirtek-32
- 16: Sempal CBTY-11T_RP
- 17: Proservis Pramer TC-100-K
- 18: Valtec VHM-T-C
- 19: SPBZIP Ц32726A, Ц32727A
- 20: Puls CTK-15-M
- 22: Sempal CBTY-11T
- 23: ELF-M
- 24: Kapar-2-213-223
- 25: MBUS universal

F: the default frequency plan

- EU: EU863-870
- IN: IN865-867
- RU: RU864-870
- KZ: KZ865-868
- US: US902-928
- AU: AU915-928
- AS1: AS923-1
- AS2: AS923-2
- AS3: AS923-3
- AS4: AS923-4
- KR: KR920-923