

Mars



DeepWave Radio Real Time System temperature probe for long distance transmission, with ePaper high definition display, 4-keys control keypad and acoustic alarms with a buzzer. User replaceable batteries and internal temperature sensor. **You may request the certificate traceable to a national standard.**



Main features

- Temperature sensor with long distance radio transmission (up to 3 km in open field)
- 2.9 "OLED display
- 4-key keypad for screen transitioning and
- User replaceable batteries
- Can be calibrated (Accredia traceable certificate)
- External antenna included

Plus

- Easy to install and configure
- Covers long transmission distances
- Low energy draining display
- Local alarm for immediate intervention
- Validatable DeepWave system in pharmaceutical and healthcare environment
- External antenna increases the communication range by a 50% in all directions

The system

Mars is part of the DeepWave system:

- DeepWave radio modules (LoRa nodes)
- Helios receiver (LoRa gateway)
- TSLog 21 software

Accessories

- TSLog 21
- Helios - LoRa Gateway
- Surface Support for DeepWave Node
- Wall Mounting support for DeepWave Node

Applications



Cold Chain



Warehouses



Environment



Food & Beverages



Laboratories



Constructions

Technical specifications

Dimensions	151.6 X 88 x 33 (mm) (with connectors) / 146.6 X 88 X 33 (mm) (without connectors)
Weight	280 g
Materials	ABS, Rubber
Sensors	1 X internal temperatura
Temperature range	-20 °C ÷ +50 °C (non condensing)
Standard calibration points (temperature)	-10/0/20/40°C
Extra calibration points (temperature)	Within the range -20 °C ÷ +50 °C
Temperature resolution	0,02 °C
Temperature accuracy	± 1 °C without certificate / ± 0,25 °C with Accredia traceable certificate (valid in the calibration range)
Sensor type	NTC
Memory (n. of acquisitions)	16.383
Acquisition step	From 1 minute up (in steps of 1 minute)
Display size	
Display and functions	Current values, Alarms, Diagnostics, Radio Signal Strength
Alarms	Local (acoustic)
Functions	Data recording, transmission, alarm
Communication	Radio
Protocollo Radio	LoRa
Available frequencies	868 MHz, 915 MHz, 920 MHz, 923-2 MHz
Antennae	External
Battery type	3 X AA 1,5 V batteries
Battery life	18 months with 15 minutes transmission step
Protection degree	IP65
Software&Mobile App	TSLog 21
Regulation compatibility	CE, ROHS
Regulation compatibility	FDA 21 CFR Part 11, Annex 11, GAMP 5
Acquisition step	From one every 5 minutes up (in steps of 1 minute)