

# Mercury



Mercury radio module of the LoRa DeepWave system: large ePaper screen (same as the one of ebooks), 2 connectors for Smart Sensor chosen from those available (temperature, humidity, differential pressure, light), local sound alarms via buzzer. The **Smart Sensors** (not included) are supplied with an **ISO calibration certificate** and allow fast, economic and easy recalibration of the whole system, without external intervention. Mercury mounts an external antenna also. DeepWave solution is based on the Lo.Ra. (Long Range) radio protocol which allows transmission over very long distance and requires only one Helios receiver to cover all nodes. Batteries are easily replaceable by the user.



## Main features

- Lora radio module for long distances transmission (up to 3 km in open field)
- Supports up to two Smart Sensors of temperature, humidity, differential pressure, light
- 2.9" wide ePaper display
- External antenna included
- 4-buttons for screen control
- User replaceable batteries
- Certificate traceable to a national standard included with the Smart Sensors

## Plus

- Easy to install and configure
- Quick recalibration with the Smart Sensors
- With the external antenna you increase the transmission by 50%
- Wide and low energy display
- Local alarm for immediate intervention
- Covers long transmission distances
- Validatable DeepWave LoRa system in pharmaceutical and healthcare environment

## The system

Temperature, humidity, differential pressure DeepWave system made up by:

- DeepWave radio modules (Lo.Ra. nodes)
- Helios receiver (Lo.Ra. gateway)
- TSLog 21 software

## Applications



Healthcare



Cosmetics



Pharmaceutical



Medical



Cold Chain



Warehouses



Environment



Food & Beverages



Laboratories



Constructions



Validation

## Accessories

- TSLog 21
- Helios - LoRa Gateway
- Surface Support for DeepWave Node
- Wall Mounting support for DeepWave Node
- Temperature Smart Sensor
- -80°C temperature Smart Sensor
- 200 temperature Smart Sensor
- Temperature Smart Sensor with thin cable
- Temperature and humidity Smart Sensor
- Differential Pressure Smart Sensor
- Light Smart Sensor (On/Off)
- Temperature Smart Sensor with internal sensor
- Smart Sensor / ZED IT adapter cable extensions
- Flat DeepWave Node / Smart Sensor cable extension
- LoRa Node / Smart Sensor cable extensions

## Technical specifications

Dimensions	159.6 X 88 x 33 (mm) (with connectors) / 146.6 X 88 X 33 (mm) (without connectors)
Weight	280 g
Materials	ABS, Rubber
Sensors	2 X Smart Sensor inputs
Temperature range	-20 °C ÷ +50 °C (non condensing)
Memory (n. of acquisitions)	16.383
Acquisition step	From one every 5 minutes 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	12 months with 15 minutes transmission step and 2 sensors connected
Protection degree	IP65
Software&Mobile App	TSLog 21
Regulation compatibility	CE, ROHS
Regulation compatibility	FDA 21 CFR Part 11, Annex 11, GAMP 5