Neptune

LoRa wireless datalogger for DeepWave radio system: clear OLED screen, 2 inputs for Smart Sensor to choose from those available (temperature, humidity, differential pressure, light), local acoustic alarms with buzzer. The **Smart Sensors** (not included) are supplied with an **Accredia traceable calibration certificate** and allow immediate, economic and easy recalibration of the system. Neptune has the antenna to extend the transmission range and the external power supply (the batteries have a backup function), as well as a relay output to connect whatever instrument should be activated when an alarm occurs. For example, it is possible to connect flashing lights, sirens or other. DeepWave is based on Lo.Ra. (Long Range) radio for a very long distance transmission that allows to have only one Helios receiver to cover all the sensors. **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
- 0.91" OLED display
- External power connector (power adapter not included)
- External antenna included
- 4-buttons for display screen scrolling
- User replaceable batteries
- Certificate traceable to a national standard included with the Smart Sensors
- Relay output to activate lights, alarms, phone dialers etc.

Plus

- Easy to install and configure
- Quick recalibration with the Smart Sensors
- With the external antenna you increase the transmission by 50%
- Local alarm for immediate intervention
- Thanks to the external power you forget to change the batteries
- Connect quasliasi what you want to be activated aloo trigger of an alarm
- Covers long transmission distances
- Validatable DeepWave LoRa system in pharmaceutical and healthcare environment

The system

Wireless DeepWave real time monitoring system is made up by:
- DeepWave radio modules (Lo.Ra. nodes)
- Helios receiver (Lo.Ra. gateway)
- TSLog 21 software

Accessories

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

Applications

Cosmetics

Pharmaceutical

Medical

Healthcare

Cold Chain

Warehouses

Environment

Food & Beverages

Laboratories

Constructions

Validation

- -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	146.6 X 88 X 33 (mm)
Weight	280 g
Materials	ABS, Rubber
Sensors	2 X Smart Sensor inputs
Temperature range	-20 °C ÷ +50 °C
Memory (n. of acquisitions)	16.383
Acquisition step	From 1 minute up (in steps of 1 minute)
Display and functions	Current values, Alarms, Diagnostics, Radio Signal Strength
Display size	0,91" 22,4 x 5,7 (mm) (128 x 32 pixel)
Alarms	Local (acoustic)
Functions	Data recording, transmission, alarm
Communication	Radio
Protocollo Radio	Lo.Ra.
Frequenza	868 MHz
Antennae	External
Battery type	3 AA 1,5 V batteries
Battery life	18 months with 15 minutes transmission step
Power supply	6-26 V (adapter not included)
Protection degree	IP65
Relais output	✔
Software&Mobile App	TSLog 21
Regulation compatibility	CE, ROHS
Regulation compatibility	FDA 21 CFR Part 11, Annex 11, GAMP 5