Moon

Radio module LoRa data logger for DeepWave monitoring in real time system with long range transmission, mounts an external antenna that extends the transmission distance in all directions. It has an OLED screen for checking, 4-keys for screen scrolling, buzzer for sound alarms, external power connector (adapter not included). It comes with 2 Smart Sensors inputs to connect any type of available Smart Sensor (not included). The **Smart Sensors** are always provided with a **reference traceable calibration certificate** and allow an quick, economic and easy recaslibration procedure of the whole system without any external the intervention. Batteries are standard and easily replaceable by the user (with the external power the batteries are used for backup).

Main features

- Radio module with long distance transmission (up to 3 km in open field)
- Accepts up to two Smart Sensors of temperature, humidity, differential pressure, light
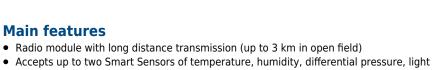- 0.91" OLED display
- External antenna to increase the distance up to 50%
- 4-buttons for screen control
- External power
- User replaceable batteries
- Accredia traceable certificate included along with the Smart Sensors

Plus

- Quick installation
- Easy configuration
- Fast recalibration procedure with the Smart Sensors
- Covers long transmission distances
- Easy to read display
- Acoustic alarms for immediate intervention
- Forget about battery replacing thanks to the external power
- Validatable DeepWave system in pharmaceutical and medical environment

The system

DeepWave is made up by:
- DeepWave radio modules (LoRa nodes)
- Helios receiver (LoRa gateway)
- TSLog 21 software

Applications

Pharmaceutical

Cosmetics

Medical

Cold Chain

Healthcare

Warehouses

Environment

Validation

Food & Beverages

Laboratories

Constructions

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	0,91" 22,4 x 5,7 (mm) (128 x 32 pixel)
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
Power supply	6-26 V (adapter not included)
Protection degree	IP65
Software&Mobile App	TSLog 21
Regulation compatibility	CE, ROHS
Regulation compatibility	FDA 21 CFR Part 11, Annex 11, GAMP 5