



LoRa Radio Node for DeepWave real time monitoring certified system with long distance transmission of the data, OLED display for diagnostics, 4-buttons for screen control and buzzer for local alarms. It mounts two Smart Sensors connectors to connect any type of Smart Sensor to choose amongst the available ones (sensors are not included). The **Smart Sensors** are always provided with an **ISO calibration certificate** and allow an easy, economic and immediate recalibration of the system without the intervention of a technician. User replaceable batteries.



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
- 4-buttons for screen control
- User replaceable batteries
- ISO certificate included with the Smart Sensors

Plus

- Easy installation and configuration
- Immediate recalibration with the Smart Sensors
- Covers long transmission distances
- Clear and functional display
- Local alarm for immediate intervention
- Validatable DeepWave system in pharmaceutical and healthcare environment

The system

The DeepWave system is made up by:

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

Applications



Pharmaceutical



Healthcare



Cosmetics



Medical



Cold Chain



Warehouses



Environment



Food & Beverages



Validation



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	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	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	Internal
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