

# Differential Pressure Smart Sensor



Smart Sensor miniature differential pressure sensor for wireless data logger of the DeepWave system with LoRa Wan technology, with **pressure sensor without air passage**. Designed specifically for clean rooms but not only, it includes tubes adjustable in length by inserts in the two environments at different pressure. The sensor is without air flow passage for the maximum security of the environment.

The Smart Sensor contains the calibration and identification data in its electronics: so the **recalibration process is simple and quick**: just replace the sensor that is sent to you, calibrated, before the calibration expires of the one installed, without having to request the intervention of a technician on site for calibration or having to remove the data loggers from their position to send them to a calibration laboratory.

**There are no additional costs!**

All Smart Sensors are supplied with an **Accredia traceable calibration certificate included**.

## Main features

- Pressure sensor without air passage
- Using the extensions it is possible to extend the cable length
- Possibility to switch sensors and devices with no calibration loss
- No air flow passage sensor

## Plus

- Easy recalibration: no need to uninstall the whole device for recalibration (sensor and unit), just disconnect the uncalibrated sensor and connect the calibrated one
- Time saving: you never lose a single minute of monitoring, since you receive the new calibrated sensor BEFORE unplugging the old one (that will be sent back to us)
- Easy to use: no configuration needed. The system recognizes automatically the sensors connected

## The system

Differential pressure with the Smart Sensors works with the DeepWave system and LoRa Wan radio nodes:

- DeepWave LoRa radio modules
- TSLog 21 software, 21 CFR compliant
- Receiver Helios



## Applications



Healthcare



Pharmaceutical



Medical



Cosmetics



Cold Chain



Environment



Validation



Warehouses



Food & Beverages



Laboratories



Logistic&Transport



Industrial

## Accessories

- Deimos
- Fobos
- Gea
- Moon
- Jupiter
- Pluto
- Neptune
- Saturn
- Mercury
- Helios - LoRa Gateway
- TSLog 21
- Smart Sensor / ZED IT adapter cable extensions
- Flat DeepWave Node / Smart Sensor cable extension
- LoRa Node / Smart Sensor cable extensions

## Technical specifications

Dimensions	43 X 22 X 11 (mm)
Temperature range	-20 °C ÷ +50 °C (non condensing)
Pressure range	-100 Pa ÷ +100 Pa
Standard calibration points (pressure)	-100 / 0 / 100 Pa
Extra calibration points (pressure)	Within the range -100 Pa ÷ +100 Pa
Pressure resolution	0,1 Pa
Pressure accuracy	±2% typical a 25°C; ±2,5% max.
Sensor type	With no air flow passage