

ENV-Series Battery-Powered Environmental Sensor

Key Features:

- Helps businesses and organizations comply with environmental health and safety standards by monitoring indoor air quality.
- Measures ambient **temperature**, **relative humidity**, and **CO2 concentration**.
- LoRaWAN communication protocol for reliable long-range data transmission.
- Compact, indoor-rated design: **85 x 85 x 33 mm**, unobtrusive **IP40** enclosure.
- Low-power operation with an **8500 mAh, 3.6 V lithium battery**, offering at least **5 years of service life**.
- **Data captured every 7.5 minutes** for precise environmental monitoring.

Sensor Specifications:

	Measurement Range	Accuracy	Notes
Temperature	-40°C to +125°C	±0.3°C	
Relative Humidity	0% to 100% RH	±2% RH	Non-condensing environment
CO2	0 to 5000 ppm	±50 ppm ±3% of reading	



Power and Battery:

- **Battery Type:** Lithium Thionyl Chloride (Li-SOCl₂).
- **Capacity:** 8500 mAh, 3.6 V.
- **Estimated Battery Life:** 5+ years under typical usage conditions.

Installation and Environment:

- **Mounting:** Indoor installation only (IP40).
- **Dimensions:** 85 x 85 x 33 mm.
- **Weight:** < 160 g.
- **Storage Temperature:** -40°C to +70°C.
- **Operating Temperature:** -40°C to +60°C (CO2 0°C to +50°C).

Approvals:

- EN 61326-1: 2013
- ETSI EN 301 489-3 V2.1.1
- ETSI EN 301 489-17 V3.2.4
- EN 61010-1:2010

Data and Connectivity:

- **Protocol:** LoRaWAN for secure, long-range, low-power data transmission.
 - **Supports:** OTAA, ABP and ADR.
 - Adaptive frequency hopping and dynamic channel selection.

Region	Frequency Band	Supported Channel Plan
Europe	EU868 (863 – 870 MHz)	16 Uplink/downlink channels including primary channels: 868.1 MHz, 868.3 MHz, 868.5 MHz
USA	NA915 (902 – 928 MHz)	64 uplink channels: 902.3 MHz to 914.9 MHz 8 downlink channels: 923.3 MHz to 927.5 MHz
Australia	AU915 (915 – 928 MHz)	64 uplink channels: 915.2 MHz to 927.8 MHz 8 downlink channels: 923.3 MHz to 927.5 MHz