

LPWAN Enviromental Device

PRODUCT DESCRIPTION

The device operates on battery power, with battery life contingent upon the device's specifications. CO2 is the component that consumes the most energy; however, the device can still function for two years using two lithium batteries. The housing is constructed from premium ABB plastic and is designed to fulfill the rigorous demands of interior use. The front panel features a high-gloss finish.

The LPWAN Environmental Device was developed for the monitoring of indoor air quality and can be provided in a range of configurations featuring different air quality sensors:

- Thermometer
- Hydrometer for measuring relative humidity
- Atmospheric pressure
- CO2

USAGE

- Monitoring air quality in public buildings, including schools and offices
- Air conditioning enhancement
- Mold Prevention on Walls
- Detection of human presence



FEATURES	PARAMETERS
Cover	IP20
Power source	3.6V lithium battery 14505(M)/2600mAh, up to 2 batteries permissible
Energy utilization	<3.5 μ A in deep sleep / 80 mA transmission (Sigfox, LoRa) / 500 mA (NB-IoT)
Battery industry	Approximately 20,000 transfers
Supported LPWAN Standards	Sigfox, LoRaWAN, NB-IoT (one of the chosen options in order)
Dimensions	100 x 100 x 25 mm
Standard/radiation weighting	130g
Temperature, humidity, and air pressure sensor	BME280/T accuracy 0.5°C/RH accuracy \pm 3%, range -40 to 85°C/0 to 100% RH / 300 to 1100 hPa
CO2 detector	SCD30 NDIR CO2 measurement, with a measurement range of 400 to 10,000 ppm.
Accelerometer, tamper switch	Optional theft deterrent system
Antenna/standard range	PCB, gain 2.5 dBi/45 to 110 km depending on LPWAN technology