



LPWAN Environmental device

LPWAN Environmental device has been designed for indoor air quality monitoring and can be delivered in various combination of air quality sensors:

- ✓ Thermometer
- ✓ Humidity meter for air relative humidity
- ✓ Air pressure
- ✓ CO2

The device is battery operated and battery lifetime depends on device equipment. CO2 is most energy consuming component, however the device is still capable to run over 2 years with 2 lithium batteries. Enclosure is made of high-quality ABB plastic and has been designed to meet high demanding interior requirements. Front panel is made in high bright surface.



Usage

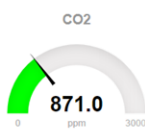
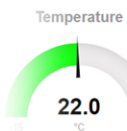
- Air quality monitoring in public buildings, such as schools, offices etc.
- Air condition optimization
- Wall mold prevention
- Persons presence detection

LPWAN Environmental device	Parameter
Protection	IP20
Power supply	3.6V lithium battery 14505(M)/2600mAh, 2 batteries possible
Power consumption	<3,5uA in deep sleep/80mA transmission (Sigfox, LoRa) / 500mA (NBLoT)
Battery lifetime	Aprox. 20 000 transmissions
Supported LPWAN standards	Sigfox, LoRaWAN, NBLoT (one of selected upon order)
Dimensions	100 x 100 x 25 mm
Weight standard/radiation	130g
Sensor temperature/humidity/air pressure	BME280/ T accuracy 0.5°C/RH accuracy +/-3%, range -40 to 85°C/0 to 100%RH/300 to 1100hPa
CO2 sensor	SCD30 NDIR CO2 measurement, range of measurement from 400 to 10000ppm
Accelerometer, tamper contact	Optional, antitheft protection
Antenna/typical range	PCB, gain 2.5dBi/45 to 110km depends on LPWAN technology





Battery:
 Temp: 22°C
 RH: 47.2%
 CO2: 871ppm



History:

Date	Time	Batt	Signal	Temp	RH	CO2
2019-11-21	08:19:31	3.57V	-65dB	22°C	47.2%	871ppm
2019-11-21	07:19:32	3.54V	-67dB	22.1°C	47.7%	1347ppm
2019-11-21	06:19:39	3.54V	-67dB	22°C	47.4%	1227ppm
2019-11-21	05:19:32	3.57V	-66dB	21.8°C	47.4%	1229ppm
2019-11-21	04:19:33	3.57V	-67dB	21.6°C	47.6%	

