



MCF-LW12CO2

LoRaWAN® indoor environmental sensor with VOC, LUX and CO2

This device reads temperature, humidity, pressure, light intensity, air quality (expressed as IAQ or bVOC value) and CO2 and sends collected data over the LoRaWAN® network. Ideally suited for a wide range of applications such as building automation, condition monitoring, predictive maintenance, security, healthcare and many more use cases.

Characteristics:

- CPU Cortex M0+
- EEProm 32Kb
- Flash 64k
- Encryption AES 128 bit
- Class A LoRaWAN® stack EU868, AS923
- Temperature -10 \div 60 °C (\pm 0.5°C)
- Humidity 0 ÷ 100% (20 ÷ 80% ±3% @25°C, 0 ÷ 20% - 80 ÷ 100% ±5% @25°C)
- Pressure 300 ÷ 1100hPa (±1hPa)
- Ambient Light Sensor 0.01 ÷ 80000 lux (±15%)
- IAQ index 0 ÷ 500
- bVOC 500 ÷ 50'000ppb (sensor to sensor deviation ±15%)
- CO2 300 ÷ 5000 ppm (±50ppm ±3% of reading)
- Battery powered with 5 years of life (according radio propagation effectiveness and 15 min reading period)
- NFC for IoT node setup, FW upgrade and data reading
- Installation indoor
- Storage temperature range -20 + 80C°
- Working temperature range -10 + 60C
- Dimensions: 120x80x25mm
- Weight ~225g

Applications:

- Home Building automation
- Energy saving
- Environmental quality control





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