

OY1210 LoRaWAN CO2 meter

LoRaWAN sensor that measures **temperature, humidity and carbon dioxide**, with an incredible **maintenance free lifetime of 5 years at a 15-minute measurement interval**. Easy to use, configurable over the air and stylish in design to fit into indoor spaces.

Typical use cases:

Indoor climate control

School buildings, office spaces, living spaces



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Technical specification

Operating principle

Non-dispersive infrared (NDIR) Yes
 Sample method Diffusion

Accuracy and range

Temperature accuracy $\pm 0,2$ °C (conditions 0 °C to +50 °C)
 Temperature range -20 °C to +60 °C
 Humidity accuracy $\pm 2\%$ (conditions 10-90% RH)
 Humidity range 0% to 100% non-condensing
 Measurement range CO₂ 400 – 5000 ppm
 Accuracy CO₂ ± 50 ppm $\pm 3\%$ of reading
 RMS noise CO₂ 0.7ppm @ 400ppm
 1.4ppm @ 2000ppm (filtered)

Accuracy of $\pm 0,1$ °C and $\pm 1,5\%$ humidity available upon request

Connectivity

Network LoRaWAN
 Frequency bands 868 MHz
 Provisioning Over the air & personalization

Size

Size 111 x 77 x 26 mm
 Weight 75g

Security

Algorithms AES-128
 Hardware Cryptographic co-processor
 Features Secure boot
 Secure firmware upgrade

Hardware based ultra secure key storage

Battery life

Battery life length >5 years (at 15 minute intervals, SF7)
 Battery type 2x Lithium-thionyl 3.6V (replaceable)
 Capacity 3.6Ah

Configuration

Measurement intervals 15 minutes, configurable over the air
 Transmission intervals 15 minutes, configurable over the air

Unique App EUI available upon request

Enclosure

IP30

Certifications

RoHS compliant
 CE
 LoRaWAN