EM500-CO2 Carbon Dioxide Sensor (4 in 1)

APPLICATIONS

- SMART AGRICULTURE
- FOREST FIRE DETECTION
- SMART BUILDING
- BASEMENT & UG PARKING MONITORING
- WAREHOUSE ENVIRONMENT MONITORING

FEATURES

INTEGRATED WITH MULTIPLE SENSORS
like CO2, temperature, humidity, etc.

EQUIPPED WITH NFC
for easy configuration

ULTRA-WIDE-DISTANCE TRANSMISSION
up to line of sight of 10km

BUILT-IN WITH REPLACEABLE BATTERY
19000 mAh and work for 10 years without replacement

IP65 WATERPROOF ENCLOSURE
for harsh environment applications

COMPATIBLE WITH STANDARD
LoRaWAN gateways & network servers

MILESIGHT IOT CLOUD
compatibility

SPECIFICATIONS

Wireless Transmission

Technology	LoRaWAN ®
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923

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Tx Power	16dBm(868)/20dBm(915)/19dBm(470)
Sensitivity	-137dBm @300bps
Mode	OTAA/ABP Class A

Measurement

Carbon Dioxide (CO2)

Range	400 - 5000 ppm
Accuracy	± (30 ppm + 3 % of reading)
Resolution	1 ppm

Temperature

Range	-30°C to + 70°C
Accuracy	0°C to + 70°C (+/- 0.3°C), -30°C to 0°C (+/- 0.6°C)
Resolution	0.1°C

Humidity

Range	0% to 100% RH
Accuracy	10% to 90% RH (+/- 3%), below 10% and above 90% RH(+/- 5%)
Resolution	0.5% RH

Barometric Pressure

Range	300 - 1100 hPa (-40°C - 85°C)
Accuracy	±1 hPa
Resolution	0.1 hPa

Operation

Power On & Off	NFC, Power Button (Internal)
Configuration	Mobile App (via NFC) or PC software (via USB Type-C)

Physical & Characteristics

Power Supply	19000 mAh Li-SOCL2 battery (ER34615)
Battery Life	10 years (10 min interval)
Operating Temperature	-30°C to +70°C
Relative Humidity	0% to 100% (non-condensing)
Ingress Protection	IP65
Dimension	147.9 × 71 × 69.5 mm (5.8 × 2.8 × 2.7 in)

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Installation	Pole, wall or DIN Rail Mounting

Approvals

Regulatory	CE, FCC, RoHS, LoRaWAN ® Certified
EMC	EN 55032 EN 55035
EMS	IEC 61000-4-2 Level 3 IEC 61000-4-3 Level 2 IEC 61000-4-8 Level 4
Radio Frequency	FCC Part 15B FCC Part 15.247 EN 300 330 EN 301 489-1/3 EN 300 220-1/2
Safety	EN62368-1

* Tested under laboratory conditions and for guideline purposes only

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