

Sensor for measuring temperature, CO₂ and humidity

The combined true CO₂, temperature and humidity device is a plug-and-play transmitter. Great care has been taken to design a sleek, good looking device with high security and performance. The device has two antennas for maximum range in both vertical and horizontal directions.

PERFORMANCE

The battery level is continuously monitored and a low level warning is issued when battery is nearing depletion. The CO₂ sensor is also monitored and a warning is issued if it is not working. The device also keeps count on the total running time since first start and powerup.

WARNING / ALARM INDICATION

The device comes with visual and acoustic warning/alarm to alert on high CO₂ concentration. The sensor will in this case use a buzzer and high brightness LED to indicate that the CO₂ reached the Warning or Alarm level. This indication can then be used to alert someone that it is time to ventilate the room, e.g., by opening a window.

Since a high concentration of CO₂ correlates to a higher virus spread and causing concentration problems, early warnings and alarms provide both a safer and more efficient workspace.



SPECIFICATION

FIRMWARE

MODES	C1-A/B, T1 or S1
SEND INTERVAL	60s - 1 hour
SAMPLE INTERVAL	
CO ₂	Twice* as long as send interval (default 4 min)
Temperature	Same as send interval (default 2 min)
Humidity	Same as send interval (default 2 min)
ENCRYPTION	AES128 encryption OMS mode 5. Profile A.
STANDARD	T1-mode, transmission 2 minutes, encryption ON, unique key.

WARNINGS

BATTERY	Low battery
SENSOR ERROR	CO ₂ sensor not working
CALIBRATION	Calibration not completed yet

LIFESPAN

LAN-WMBUS-E2-CO2	14 years** typical, standard configuration and operating temperature
LAN-WMBUS-E2-CO2-(I)	10 years** typical, standard configuration and operating temperature

DEVICE

LAN-WMBUS-E2-CO2
LAN-WMBUS-E2-CO2-I

GENERAL INFORMATION

STANDARDS	2014/53/EU (RED), EN 13757-3/4:2013, OMS 4.0.2
MATERIAL	White, ABS

OPERATING CONDITIONS

CO ₂ TEMP	0°C to +55°C (-20°C to +55°C on request)
CO ₂ PRESSURE	950 mbar to 1050 mbar (other range on request)
RADIO TRANSMITTER	Max: -30°C to +85°C, recommended +5°C to +50°C
RELATIVE HUMIDITY	Non condensing
SIZE (W x H x D)	80 x 80 x 25 mm

POWER

POWER SUPPLY	2 x ER18505 3.6V Li-SOCI2 battery pack.
CAPACITY	7600-8200 mA
VOLTAGE	2.6 to 3.6V
RADIO	14 dBm (25mW) output power to antennas. ERP typical: 9.5 dBm (9 mW)

ANTENNAS

2 antennas for true differential transmission.

Specifications in this document are subject to change without notice.