

ZENNER CO₂ INDICATOR L868 ID A for LoRaWAN®

The ZENNER CO₂ INDICATOR is a compact indoor LoRaWAN® radio sensor (868 MHz) for measuring the CO₂ content of indoor air. This product uses the photoacoustic principle to detect the CO₂ concentration (ppm) in real time, enabling more efficient ventilation behaviour and faster response time.

With the integrated display and the colour-changing LED display, the sensor always provides real-time information about the current CO₂ value, the battery level and the status of the LoRaWAN® connection. An optimal stationary and mobile companion in the company, at the workplace, in the meeting room or in the canteen.

It can be placed on any flat surface. In addition, the device can also be used "stand alone", i.e. without a LoRaWAN® connection, e.g. at a meeting outside the company, when visiting a customer or a restaurant outside the range of the LoRaWAN® network. Without LoRaWAN® connection, however, no remote monitoring or alarming can take place. The CO₂ limits can be set individually by radio command (downlink).



The device can be operated with the integrated rechargeable battery or permanently powered by a standard USB-A power supply unit. Please note that only the USB-A to USB-C charging cable is included, a power supply unit is required.

Features and functions

- Modern design
- Display with CO₂ indication (ppm) as well as radio signal level and battery status
- LED traffic light
- Integrated battery
- Configuration Over the Air (OTA)

Range of applications

- Indoor Air Quality
- Smart Building
- Smart School
- Smart Office
- Smart Home

ZENNER CO2 INDICATOR L868 ID A for LoRaWAN®

Evaluation of the CO₂ measured values

Range (ex works)	Evaluation	LED paint
< 800 ppm	normal	green
800 – 999 ppm	slightly increased	yellow
1.000 – 1.399 ppm	high	purple
> 1.399 ppm	very high	red

The measuring ranges can be set individually via LoRaWAN® downlink.

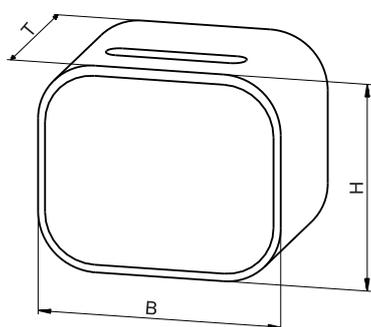
Technical data

Model	CO2 INDICATOR L868 ID A
Weight	115 g
Dimensions (BxTxH)	63.6 x 46.0 x 54.6 mm
Display Size	59.9 x 49.9 mm
LoRaWAN®	Class A
Frequency	863 ~ 870 MHz
Transmitter power	max. 14 dBm
Battery	2.000 mAh
Power supply	5V= 1A (Note: no power supply unit is included in the scope of delivery)
Operating temperature	0 ~ 40 °C
Operating Humidity	0 ~ 99% rH (non-condensing environment)
CO ₂ -Measuring Range	400 ~ 9.999 ppm
Measuring accuracy	400 ~ 2.000 ppm → ±50 ppm
Measuring accuracy	2.000 ~ 9.999 ppm → no guarantee

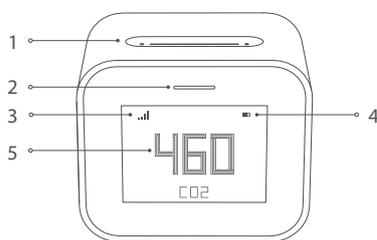
Scope of delivery

- ZENNER CO2 INDICATOR L868 ID A
- User Manual
- USB-A to USB-C cabel

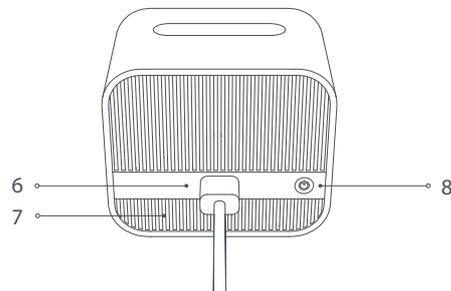
Notice: There is no 5 V power supply included in the delivery. You can use a commercially available smartphone USB-A power adapter, for this purpose.



Dimensions and product overview



1. Concave bar
2. LED-Display
3. Radio signal level
4. Battery charge status



5. CO₂-Measured value (ppm)
6. Charging port (USB-C)
7. Air vents
8. On/Off Button

ZENNER International GmbH & Co. KG

Heinrich-Barth-Straße 29 | 66115 Saarbrücken | Germany

Phone +49 681 99 676-30
 Fax +49 681 99 676-3100

E-Mail info@zenner.com
 Internet www.zenner.com