CO$_2$ measuring instrument CM 20

enocean®   NEW

- **Monitoring of room air quality**
- **Compact design**
- **Visual indication of concentration via traffic light system**
- **Desktop unit with USB-C connection**
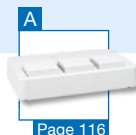- **With or without EnOcean® wireless technology**

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LED green

LED yellow

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Application

For continuous monitoring of the carbon dioxide (CO$_2$) concentration in the ambient air. Application in rooms in which many persons work, study or live and where carbon dioxide levels may consequently be elevated due to breathing, or in rooms where a very high air quality is required (for example, bedrooms, children's' rooms). High concentrations of carbon dioxide in the ambient air reduce the ability of persons to concentrate and perform. In addition, the concentration of aerosols increases with the CO$_2$ content and, therefore, the risk of respiratory infections. Ideal for educational institutions, training/meeting rooms, office areas and household.

Description

Portable CO$_2$ sensor with infrared technology in a plastic housing with USB-C interface for power supply. The CO$_2$ concentration in the room air is indicated directly at the device by a colour scale:

- LED green: No ventilation required
- LED yellow: Ventilation recommended
- LED red: Ventilation required

When the device switches from green to yellow (approx. 1,000 ppm), a short signal tone sounds (< 1 second) which is repeated every 10 minutes. When the device switches from yellow to red (approx. 1,500 ppm), 2 short signal tones sound which are repeated every 10 minutes. The signal tone can be disabled.

The version CM 20E (with EnOcean® wireless module) sends the measured values to the AFRISOhome gateway for further processing and initiation of appropriate action. For example, it is possible to start a room ventilation system in order to reduce the CO$_2$ concentration. The current carbon dioxide concentration and the history (day, week, month) is also displayed by the app AFRISOhome. This data is the ideal basis for ensuring healthy indoor ambient air. The AFRISOhome gateway in conjunction with additional AFRISO smart home products with EnOcean® wireless technology allows the user to configure a whole range of fully customisable, extensible applications.

Technical specifications

Measuring range
0/2,000 ppm

Measuring accuracy
400/1,250 ppm: ±30 ppm or ±3 % of measured value
1,250/2,000 ppm: ±30 ppm or ±5 % of measured value

Operating temperature range
Ambient: 0/40 °C
Storage: -20/+60 °C

Housing
Plastic housing (PC/ABS),
Colour: White, similar to RAL 9003
W x H x D: 50 x 60 x 50 mm
Weight: 80 g
Degree of protection: IP 20 (EN 60529)

Supply voltage
USB charger with mains plug

Visual indication
LED green: < 1,000 ppm CO$_2$
LED yellow: 1,000–1,500 ppm CO$_2$
LED red: > 1,500 ppm CO$_2$

EnOcean® wireless (CM 20E only)
EEP: A5-09-09
Frequency: 868.3 MHz
Transmission power: 10 mW

Scope of delivery
- CO$_2$ measuring instrument
- Power supply unit
- Operating instructions

PG: 4	DG	Part no.
CO$_2$ measuring instrument CM 20	-	**79134**
CO$_2$ measuring instrument CM 20E, with EnOcean® wireless module	L	**79133**

AFRISO