

Datasheet:CO₂-Messgerät CO₂-M 200

The CO₂ M 200 combination sensor is used to record CO₂ concentration, room temperature and relative humidity.

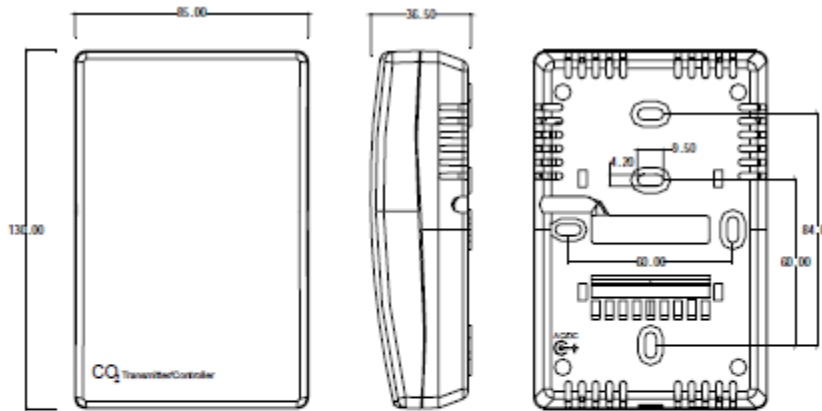
The microprocessor-controlled CO₂ measuring device detects the CO₂ content of the room air in the range from 0 to 5,000 ppm.

The CO₂ sensor with infrared sensor (NDIR) transmits the real CO₂ level in the room air. The sensor has a self-calibration algorithm and is therefore stable over a lifetime of 15 years. As standard, the sensor has the output signals 0-10V and 4-20 mA, which can be set by means of jumpers.

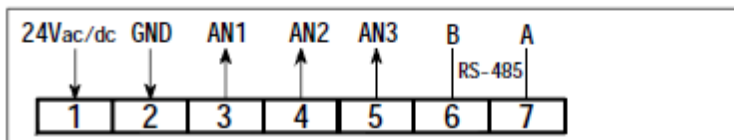


Technical data	CO₂-M 200
Measuring method	Dual Wavelength NDIR
Measuring range	0 – 5.000 ppm
Measurement accuracy	± 40 ppm + 3% from measured value at 25°C + 72%rH
Response	< 2 Min for 90 % Step change
Stability	<2% of FS over the lifetime 15 years
Measuring interval	2 sec
Temperature dependence	0,2 % / °C
Temperature sensor	NTC 5K
Temperature measuring range	0 - 50°C / ± 0,4 °C (@25°C)
Humidity sensor	HS Series capacitive Sensor
Humidity measuring range	0 - 100% RH
Humidity measurement deviation	± 3% RH (40%RH ~ 60%RH, 25 °C)
Temperature calibration	Self-compensation
Warm-up time	24 hours for initial start-up 5 minutes in all other cases
Display	Green: CO ₂ -concentration < 1.000 ppm Yellow: CO ₂ - concentration > 1.000 < 2.000 ppm Red: CO ₂ - concentration > 2.000 ppm
Power supply	24 V AC/DC
Electrical connection	Clamping point
Power consumption	1,8 W maximale, 1,2 W average
Output CO ₂ , Temperature , Humidity	3 x analog output 0-10 V (set),4-20 mA or 0-20mA, adjustable with jumper
Housing dimensions	130 x 85 x 36,5 mm
Weight	210 g
Mounting	Table stand, wall mounting or on flush-mounted box
Protection class	IP 30
Subject to technical changes	

Datasheet: CO₂- Sensor housing CO₂-M 200



Connection terminals



Connection	Function	Electrical description
1 24 V ac/dc	Voltage +	24VAC/ 24VDC(+)
2 GND	Ground (-)	24VAC/ 24VDC(-)
3 OUT 3 CO2	Analog output (+)	0-10 VDC linear 0-5.000 ppm adjusted 4-20mA linear 0-5.000 ppm
4 OUT 2 Temp	Analog output(+)	0-10 VDC linear 0-50 °C adjusted 4-20mA linear 0-50 °C
5 OUT 1 RH	Analog output (+)	0-10 VDC linear 0-100 % r.F adjusted 4-20mA linear 0-100 % r.H

Set analog output:

The analog outputs CO₂, temperature and rel. humidity are set to 0-10 V at the factory. The analog outputs can be changed to 4-20 mA or 0-20 mA.

- Remove sensor from voltage
- In the housing, set all jumpers S1 to S6 down, row designation I. All jumpers up, row designation V corresponds to 0-10 V output.
- Jumper J1 positioned at the top left has no connection, corresponding to 0-10 V or 0-20 mA outputs. If it is closed, the output signals are 2-10 V or 4-20 mA. The other jumpers J2 to J4 are only for manufacturing purposes

Opening the housing

