

Remote CO₂ concentration thermometer hygrometer with Ethernet interface and two relays

code: H6520



Temperature, humidity, CO₂ level sensor with two output relays.

Sensor H6520 is designed for online monitoring of temperature, relative humidity and CO₂ of air without aggressive substances. Other devices are controlled by two relay outputs.

High precision capacitive polymer sensor ensures excellent long term calibration stability and ultimate accuracy. Measured values are also converted to other humidity interpretation: dew point temperature, absolute humidity, specific humidity, mixing ratio and specific enthalpy.

The CO₂ measurement is based on a 2-source, 2-beam process. CO₂ measurement with long-term stability is guaranteed thanks to the proven non-dispersive infrared (NDIR) CO₂ measurement cell. The unique patented auto-calibration procedure compensates for aging of the infrared source and guarantees high reliability, long term stability and eliminates the need of periodical recalibration in the field.

The CO₂ concentration is shown on the display or signaled by a color LED.

Processing and analysis of measured data:

- online in [COMET Cloud](#)
- [COMET Database](#) software
- [integration into 3-party systems](#)

[Optional CO₂ measuring range extension from the standard 0 to 5,000 ppm up to 0 to 10,000 ppm \(available at extra cost\):](#)

- **Extended measuring range:** 0 to 10 000 ppm
- **Accuracy in extended range:** 100 ppm + 5% of the measured value at 25 °C and 1013 hPa

Technical data

TEMPERATURE SENSOR	
Measuring range	-30 to +80 °C
Accuracy	±0.4 °C
Resolution	0.1 °C
HUMIDITY SENSOR	
Measuring range	0 to 100 % RH
Accuracy	±2.5 % RH from 5 to 95 % at 23 °C
Resolution	0.1% RH
DEW POINT	
Measuring range	-60 to +80 °C
Accuracy	±1.5 °C at ambient temperature T <25 °C and RH >30 %
Resolution	0.1 °C

CO2 SENSOR	
Measuring range	0 to 5000 ppm
Accuracy	±(50ppm +3% from reading) at 25°C and 1013hPa
Resolution	1 ppm
RELAY OUTPUTS	
Quantity	2
Maximal voltage	50 V
Maximal current	2 A
Maximal power	60 VA
GENERAL TECHNICAL DATA	
Operating temperature	-30 to +60 °C
Channels	internal temperature, humidity and CO ₂ sensor
Counted values	dew point, absolute humidity, specific humidity, mixing ratio, specific enthalpy
Acoustic alarm	from built-in beeper - switchable
Output	Ethernet
Measuring interval	2 s; CO ₂ 15 s
Available temperature units	degrees Celsius, degrees Fahrenheit
Communication protocol	WWW, ModbusTCP, SNMPv1, SOAP, XML
Alarm protocols	E-mail (SMTP authentication is supported), SNMP Trap, Syslog
Power	9-30 Vdc
Protection class	IP30
Dimensions	136 x 213 x 45 mm; stem length 75mm
Weight	approx. 340 g
Warranty	3 years