

WebSensor - remote CO2 concentration thermometer hygrometer with Ethernet interface



code: T6541

CO2 concentration, temperature and relative humidity t-line Web sensor. Remote alarm.

Web Sensor with built-in ${\rm CO_2}$ concentration, relative humidity and temperature sensors.

A multiple point CO_2 and temperature adjustment procedure leads to excellent CO_2 measurement accuracy over the entire temperature working range; this is a must for process control and outdoor applications. The dual wavelength NDIR CO_2 sensing procedure compensates automatically for ageing effects. The CO_2 module is highly resistant to pollution and offers maintenance free operation and outstanding long term stability.

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

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

Technical data

| TEMPERATURE SENSOR | |
|--------------------|-------------------------------------------------|
| Measuring range | -30 to +105 °C |
| Accuracy | ±0.4 °C |
| Resolution | 0.1 °C |
| HUMIDITY SENSOR | |
| Measuring range | 5 to 100% RH |
| Accuracy | ±2.5% relative humidity from 5 to 95% at 23°C |
| Resolution | 0.1% RH |
| DEW POINT | |
| Measuring range | -60 to +80 °C |
| Accuracy | ±1.6°C at ambient temperature T<25°C and RH>30% |
| Resolution | 0.1 °C |
| CO2 SENSOR | |
| Measuring range | 0 to 10 000 ppm |
| Accuracy | ±(100ppm +5% from reading) at 25°C and 1013hPa |
| Resolution | 1 ppm |

| GENERAL TECHNICAL DATA | |
|---------------------------------------------------|----------------------------------------------------------------------------------|
| Operating temperature | -30 to +80 °C |
| Channels | 1x connectable temperature+humidity probe, 1x external CO ₂ sensor |
| Counted values | dew point, absolute humidity, specific humidity, mixing ratio, specific enthalpy |
| Output | Ethernet |
| Measuring interval | 2 s; CO ₂ 15 s |
| Range of humidity sensor temperature compensation | all temperature range |
| Communication protocol | WWW, ModbusTCP, SNMPv1, SOAP, XML |
| Alarm protocols | E-mail, SNMP Trap, Syslog |
| Power | 9-30 Vdc |
| Protection class | IP30 electronics; IP40 temperature+humidity sensor; IP65 CO ₂ sensor |
| Dimensions | 88,5 x 147 x 39,5 mm |
| External probe T+RH cable length | 1 meter (optionally 2 or 4 meters) |
| External probe cable length CO2 | 1 meter (optionally 2 or 4 meters) |
| Weight | approx. 150 g |
| Warranty | 3 years |