

DX 330

Digital Indoor Air Quality probe (IAQ)



- Interchangeable
- Low power
- Fast and accurate
- Can be plugged to meter with or without connection cable
- Incorporates high grade rH, CO₂ and VOC sensors
- Premium sensor combination to evaluate air quality in detail
- Adjustable
- Optional DAkKS/ACCREDIA certificate available for rH and T

DESCRIPTION

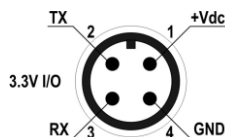
DX 330 is a digital Indoor Air Quality (IAQ) probe for the PRO D01 / PRO D05 handheld meters. The probe measures:

- Temperature
- Relative humidity, dewpoint, abs. humidity, wet bulb temperature
- CO₂
- Atmospheric pressure
- VOC index *)

The probe is supplied factory-calibrated, and it is ready to use. The probe can be optionally supplied with a DAkKS/ACCREDIA calibration certificate.

The calibration data are stored in the probe, allowing for interchangeability without the need for recalibration.

Equipped with 4-pin M12 connector.



M12 DX 310 sensor pin out

The sensor can either be screwed directly onto the instrument (one-handed operation) or connected with a connection cable.

*) VOC's (volatile organic compounds) are air pollutants with negative influence on air quality. Each indoor environment is influenced by different kinds of VOCs, which making them difficult to measure.

With having effect on human beings in focus, the VOC index interprets numerous VOCs like the human nose's perception of odors with a relative intensity compared to recent history (24 hours ~ 100).

Values higher than 100: Air quality is worse than normal, values below 100: better than normal.

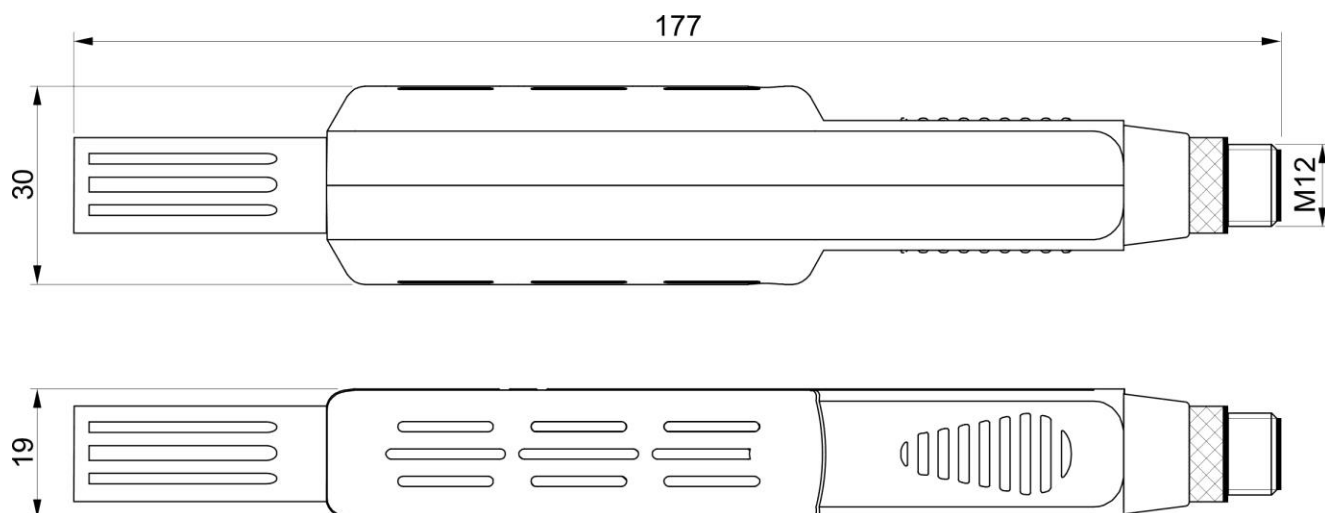
The VOC index is also sensitive to odorless VOCs, but it cannot discriminate between them.

Paired with the CO₂ measuring – which measures odorless CO₂ gas – the combination helps to interpret subjective perception of IAQ.

TECHNICAL SPECIFICATIONS

Sensor	Temperature/RH Pressure CO ₂ VOC	CMOS Piezoresistive Non-Dispersive dual beam Infrared (NDIR dual beam) Metal-Oxide film
Measuring range	Temperature RH Pressure CO ₂ VOC	-20...+80 °C 0...100% 300...1250 hPa 0...5000 ppm 1...500 (dimensionless index, relative to mean value of last 24h: 100)
Resolution	Temperature RH Pressure CO ₂ VOC	0.1 °C 0.1% 0.1 hPa 1 ppm 1
Accuracy (typ.)	Temperature RH Pressure CO ₂ VOC	± 0.1 °C (20...60 °C) / ± 0.2 °C (remaining range) ± 2% (0...80%RH) / ± 3% (80...100%RH) @ T=10...50 °C ± 0.5 hPa (300...1100 hPa / -20...65 °C) ± (50 ppm + 3% of the measure) @ 25 °C / 1013 hPa Relative qualitative measurement
Temperature drift	Pressure CO ₂	± 0.75 Pa/°C (0...55 °C / 700...1100 hPa) 1 ppm/°C (-20...45 °C)
Long-term drift	Temperature RH Pressure CO ₂	< 0.03 °C/year < 0.25 %RH/year ± 0.33 hPa/year 5% of the measure/5 years
Adjustment support		Temperature (offset or linear 2 point 0 and 60 °C) RH (linear 2 points) CO ₂ (offset, 2-point calibration at 400 and 5000 ppm) Pressure (offset)
Calculated quantities		Dew point Wet bulb temperature Absolute humidity
Response time	Temperature/RH CO ₂	10 s (T ₆₃ with 1 m/s air flow) < 120 s (T ₉₀ with 2 m/s air flow)
Operating conditions		-20...+60 °C / 0...95 %RH non-condensing ^(*)
Output		DX-Sensor interface M12
Connection (to meter)		4-pole M12
Power consumption		< 6 mA typ.
Dimensions		177 x 30 x 19 mm
Weight		45 g approx.
Housing Material		ABS

^(*) The sensor shows best performance when operated in 20...80 %RH humidity range. Long term exposure outside this indicated range (especially at high humidity) may temporarily offset the sensor response.



ORDERING CODES

DX 330-00	Digital Indoor Air Quality probe	Art no. 486786
DX 330-L01-00	Digital Indoor Air Quality probe including M12 connection cable 1m	Art no. 488123

SUITABLE INSTRUMENTS

PRO D01	1-channel handheld meter for digital probes. Supplied with 4 x AA alkaline batteries and QuickStart	Art no. 486134
PRO D05.2	2-channel handheld data logger for digital probes. Supplied with 4 NiMH rechargeable batteries, QuickStart, USB cabl. Free software ProXware downloadable from Senseca website	Art no. 486136
PRO D05.3	3-channel handheld data logger for digital probes. Supplied with 4 NiMH rechargeable batteries, QuickStart, USB cable. Free software ProXware downloadable from Senseca website	Art no. 486137

ACCESSORIES

CABLE-M12-L01	Connection cable M12 5 pole, 1 m	Art no. 487020
HD11	Saturated solution for checking relative humidity at 11% RH.	Art no. 487623
HD33	Saturated solution for checking relative humidity at 33% RH.	Art no. 487624
HD75	Saturated solution for checking relative humidity at 75% RH.	Art no. 487625