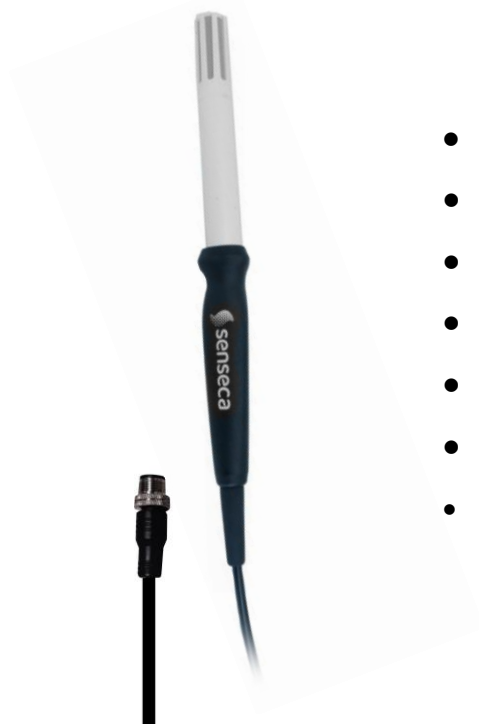


DX 311



Digital combined temperature and relative humidity probe



- Multi-point relative humidity calibration
- Interchangeable
- Low power
- Centesimal temperature and humidity resolution
- Ergonomic handle
- Fast and accurate
- Optional DAkkS/ACCREDIA certification available

DESCRIPTION

DX 311 is a digital combined temperature and relative humidity probe for the PRO D01 / PRO D05 handheld meters.

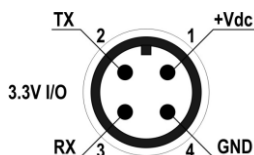
The probe supplies the following calculated quantities:

- Dew point
- Wet bulb temperature
- Absolute and specific humidity
- Mixing ratio
- Specific enthalpy
- Partial vapor pressure
- Frost point temperature
- Saturation vapor pressure above water and above ice

The probe is supplied factory-calibrated in multiple points for relative humidity, 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.

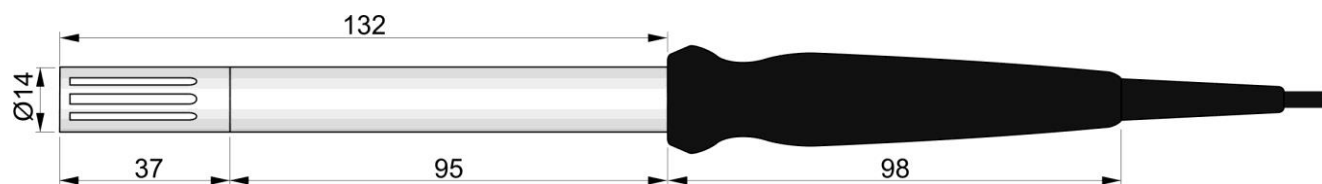
Supplied with 2, 5 or 10 m cable with 4-pin M12 connector.



M12 DX 310 sensor pin out

TECHNICAL SPECIFICATIONS

Sensor	RH	Capacitive, temperature compensated
	Temperature	Pt100
Measuring range	RH	0...100%
	Temperature	-50...+160 °C
Resolution	RH	0.01%
	Temperature	0.01 °C
Accuracy	RH	±1.2% (0...85%) / ±2% (85...100%) @ T=0...50 °C (1.5 + 1.5% of the measured value)% @ T=remaining range
	Temperature	± 0.1 °C ± 0.1% of the measured value
RH response time		10 s (10 → 80 %RH; air speed=2 m/s @ constant temperature)
Long-term drift	RH	±0.5 %RH/year
	Temperature	±0.03 °C/year
Calculated quantities		Dew Point
Operating conditions		-50...+160 °C / 0...100 %RH
Output		UART (TTL 3.3V)
Power supply		3.3...6 Vdc
Power consumption		<1 mA typ.
Connection		4-pole M12
Dimensions		Stem: Ø14 x 132 mm Handle length 98 mm Cable length: 2, 5 or 10 m
Weight		100 g approx. with 2 m cable
Materials		Stem: PBT Handle: Polyamide (PA6-GF30)



Ordering codes

DX 311 ^{1.} -00

1.	Cable length	
	-L01	1 m
	-L02	2 m
	-L05	5 m
	-XXX	Other length on request

STANDARD ARTICLES

DX 311-L01-00 Digital combined temperature and relative humidity probe, stem Ø14 x 132 mm, cable length 1 m.

Art.No. 486774

SUITABLE INSTRUMENTS

PRO D01 1-channel handheld meter for digital probes. Supplied with 4 x AA alkaline batteries, USB cable and software downloadable from Senseca website.

Art.No. 486134

PRO D05.2 2-channel handheld data logger for digital probes. Supplied with 4 NiMH rechargeable batteries, USB cable and software downloadable from Senseca website.

Art.No. 486136

PRO D05.3 3-channel handheld data logger for digital probes. Supplied with 4 NiMH rechargeable batteries, USB cable and software downloadable from Senseca website.

Art.No. 486137