

# DX 310



## Digital combined temperature and relative humidity probe



- Multi-point relative humidity calibration
- Interchangeable
- Low power
- Centesimal temperature and humidity resolution
- Direct mount on meter possible (skipping cable)
- Fast and accurate
- Optional DAkKS/ACCREDIA certification available

### DESCRIPTION

DX 310 is a digital combined temperature and relative humidity probe for the PRO D01 / PRO D05 handheld meters.

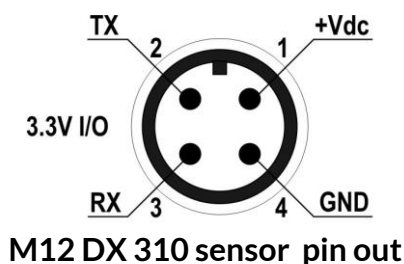
The probe supplies the following calculated quantities:

- 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.

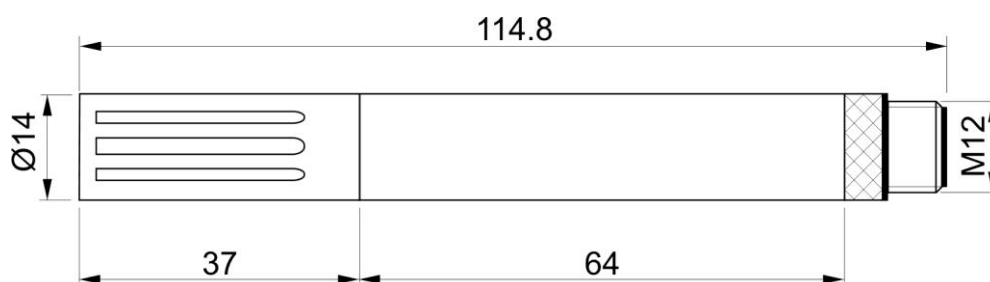
The calibration data are stored in the probe, allowing for interchangeability without the need for recalibration.

Equipped with 4-pin M12 connector.



## TECHNICAL SPECIFICATIONS

Sensor	RH	Capacitive, temperature compensated
	Temperature	Pt100
Measuring range	RH	0...100%
	Temperature	-40...+125 °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		-40...+80 °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 101 mm Overall: Ø14 x 114,8 mm
Weight		20 g approx.
Material		PBT



## Ordering codes

**DX 310-00** Digital combined temperature and relative humidity probe, stem Ø14 x 101 mm.

**Art.No. 486793**

**DX 310-L01** Digital combined temperature and relative humidity probe, stem Ø14 x 101 mm, incl. 1 m PVC connection cable M12

**Art.No. 486910**

## 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**