



DATA SHEET



# SI-PRO-U-W

## Relative humidity and temperature probe for clean rooms

### Description

Interchangeable panel hygrometry probe for cleanrooms: 0 to 100 %RH, -20 to 80 °C (-4 to 176 °F). Stainless steel body and sintered filter. Autolock connector. Si-ACC-RVP cable is needed to connect to Si-CPE320 transmitters. Supplied with adjustment certificate.

### Advantage:

- Flush mount probe
- High accuracy and long-term stability
- VHP resistant
- Easy to install - detachable probe cable
- Enables the calculation of psychrometric values

### Main applications:

- Clean room/air cabinet, connected to a Si-CPE320 transmitter

Designation: **Si-PRO-U-W**

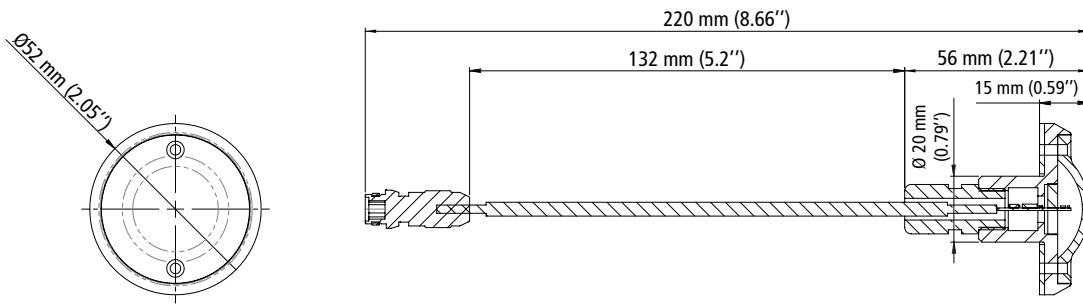
Sales reference: **27987**

### Technical features

Parameter	Measuring range	Accuracy*	Resolution
Pt 100 temperature (°C, °F)	-20 to 80 °C (-4 to 176 °F)	±0.25 °C ±0.2% of measured value (±0.45 °F ±0.2% measured value)	0.1 °C, 0.1 °F
Relative humidity (%RH)	0 to 100%RH	±2.0 %RH (between 40 and 80 %RH) ±3.0 %RH (for RH <40 %RH or >80 %RH) Temperature dependence: ±0.04 x (T-20) %RH (if T<15°C or T>25°C)	0.1 %RH
Wet temperature** (°C <sub>tw</sub> , °F <sub>tw</sub> )	-50 to 100 °C <sub>tw</sub> (-58 to 212 °F <sub>tw</sub> )	-	0.1 °C <sub>tw</sub> , 0.1 °F <sub>tw</sub>
Dewpoint** (°C <sub>td</sub> , °F <sub>td</sub> )	-50 to 100 °C <sub>td</sub> (-58 to 212 °F <sub>td</sub> )	-	0.1 °C <sub>td</sub> , 0.1 °F <sub>td</sub>
Frost point** (°C <sub>tf</sub> , °F <sub>tf</sub> )	-50 to 100°C <sub>tf</sub> (-58 to 212 °F <sub>tf</sub> )	-	0.1°C <sub>tf</sub> 0.1°F <sub>tf</sub>
Absolute humidity** (g/m <sup>3</sup> )	0 to 1000 g/m <sup>3</sup>	-	0.1 g/m <sup>3</sup>
Enthalpy** (kJ/kg)	0 to 15,000 kJ/kg	-	0 to 9999.9: 0.1 kJ/kg 10,000 to 15,000: 1 kJ/kg
Mixing ratio** (g/kg)	0 to 1000 g/kg	-	0.1 g/kg

\*All the accuracies indicated in this technical datasheet were stated in laboratory conditions, and can be guaranteed for measurements carried out in the same conditions, or carried out with calibration compensation.  
\*\*Calculated value

## Probe dimensions



## Probe cable connection

A probe cable of 2 m length is mandatory to connect the probe to a Si-CPE320 transmitter:

- **Si-ACC-RVP; Sales reference: 28002**
- 2 extension cables are also available:
- **5 m length: Si-ACC-R5; Sales reference: 28000**
- **10 m length: Si-ACC-R10; Sales reference: 28801**

It is possible to combine probe cables, up to a maximum total length of 12 m.

## Accessories (see specific data sheet)

- Cable extensions