



# SF<sub>6</sub>-Hygrometer



High Precision SF<sub>6</sub>-Moisture Testing

## SF<sub>6</sub>-Hygrometer

The **SF<sub>6</sub>-Hygrometer** has been particularly designed to be used on SF<sub>6</sub>-filled equipment. It is a stand-alone device to quickly and accurately measure the amount of moisture present within the tested SF<sub>6</sub>. The automatised final value determination allows to achieve the measurement result quickly and easily. Because the unit contains an automatic flow and pressure control module, the user does not need to be concerned with the setting of the correct flow rate, or to compensate variations in the equipment. Further to that all readings are displayed in real-time on a touch-screen display in parts per million volume (ppm<sub>v</sub>) or mass (ppm<sub>w</sub>) or dew point in °C.

### Features:

- Range of -65°C to +20 °C at operation temperature of up to 55°C
- Highly sensitive, accuracy of 0.1 °C
- No consumables
- DCC (Dynamic Contamination Correction) for compensating reductions caused by contamination
- Self test function: Maximum cooling capacity
- Automatic final value determination
- Display of moisture values in:
  - dew point (°C) (ambient or compartment pressure) or
  - parts per million volume (ppm<sub>v</sub>) or
  - parts per million mass (ppm<sub>w</sub>)
- The measured pressure can be displayed in:
  - bar or
  - kPa or
  - psi
- Touch-screen interface
- Fast test results (T90 <10 minutes)
- Using the USB-connection the automatically stored data can be downloaded to a PC for storage/archiving and reporting
- The **SF<sub>6</sub>-Hygrometer** is equipped with a metall coated teflon sampling hose with self closing quick connectors and standard adapters for immediate use

### Technical Specifications

Range	+20 to -65°C dew point
Indication	Related to ambient pressure in °C <sub>td</sub> or in ppm <sub>v</sub> or in ppm <sub>w</sub>
Tolerance	Dew point ± 0.1 °C
Response Speed	2°C sec <sup>-1</sup> plus settling time
Stability	< 0,05 °C
Repeatability	< 0,05 °C
Dew-point Sensor	Mirror, gold plated copper Temperature: 4 wire 100 Ohm PRT 1/10 DIN class B
Flow rate	25 L/h
Measuring time	< 10 minutes
≈ Gas consumption	approx. 4.2 L per measurement at ambient pressure
Pressure	0,5-14 bar (gaseous) Automatic flow rate regulation
Operation	Purge function for hose cleaning
Display	Touchpad - Graphic display (240x128 Pixel)
Supply	85-265 AC V 47/63Hz; 100 VA
Temperature	Storage: -20 to 60 °C Operation: -20 to 55 °C
Dimensions	410 x 190 x 460 mm (WxHxL)
Weight	11 kg
	Calibrated in UKAS certified Laboratory