VAISALA

HMP80 Series Handheld Humidity and Temperature Probe

Indigo80 with HMP80N (left), HMP80L (right)

Features/Benefits:

- Portable design optimized for industrial spot-checking and field calibration. Designed for use with the **Indigo80 Handheld Indicator**. Also compatible with Indigo transmitters, and Vaisala's free Insight PC Software (handheld and transmitters sold separately)
- Relative Humidity accuracy up to ± 0.8 %RH
- Temperature accuracy up to ± 0.1 °C (± 0.18 °F)
- Available in Normal and Long models, HMP80N and HMP80L, respectively
- Uses Vaisala HUMICAP® R2C sensor for superior accuracy and stability
- Sensor purge provides superior chemical resistance for harsh conditions
- Rated for IP66 conditions with probe connection cable connected to the probe
- Calculated moisture parameter options: Relative humidity, absolute humidity, dew/frost point temperature, enthalpy, mixing ratio, water concentration, water mass fraction, wet-bulb temperature, water vapor pressure, water vapor saturation pressure, etc.
- Traceable calibration certificate included

Summary:

Humidity and temperature probe has been designed for portable use, especially with the Indigo80 Handheld Indicator. Probe shall incorporate a thin-film polymer capacitive HUMICAP® R2C humidity sensor to measure 0 ... 100 %RH with accuracy of ± 0.8 %RH from 0 ... 90 %RH at +23 °C (+73.4 °F). Composite sensor available to allow purge functionalities for use in environments with high concentrations of dust, chemicals, or certain cleaning agents. T_{63} response time of 15 seconds. Temperature sensor shall be a platinum 100 Ω RTD with accuracy up to ± 0.1 °C (± 0.18 °F) at +23 °C (+73.4 °F). Probe handle shall be IP66 rated (when probe connection cable is connected to the probe) with an operating temperature range of −10 … +60 °C (+14 …+140 °F). Probe head of HMP80N to be rated for operating temperature range of −20 … +60 °C (−4 …+140 °F). Probe head of HMP80L to be rated for operating temperatures of −50 … +120 °C (−58 … +248 °F), with a short-time measurement range up to +180 °C (+356 °F). Suitable for use in air, nitrogen, hydrogen, argon, helium, oxygen, and vacuum conditions. Probe to have chemical tolerance to temporary exposure during cleaning with deionized water or isopropyl alcohol (70%). Probe to be powered by 15 ... 30 VDC and have a non-isolated, RS-485 output. Probe shall be able to calculate and directly output relative humidity, temperature, absolute humidity, dew/frost point temperature, enthalpy, mixing ratio, water concentration, water mass fraction, wet-bulb temperature, water vapor pressure, and water vapor saturation pressure. Traceable calibration certificate included.

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