

RH Probe for Handheld Meters RHA

Low cost

ЯH

- Voltage output signal
- May be used with H7000 hand held meter or separately
- May accommodate a temperature sensor
- Fast socket connection
- Compact and convenient in use

The RHA series probes by COMECO are used to convert relative humidity of air or non-aggressive gases at normal ambient pressure into standard voltage signal. They are based on the RHT transducers, but in this case the whole electronics is fitted into probe cylindrical body. The RHA probes are especially suitable for fast measurements in combination with the COMECO's hand held humidity meters type H7000, but may be used with other humidity measurement devices that feature a programmable or scalable input. These probes utilize thin film or solid state sensing elements whose capacitance varies in proportion with medium relative humidity. A Pt100 temperature sensor may be built in for measurement of the medium temperature. RHA probes are connected to the hand held meter by means of a flexible cable and a miniature connector. Combined with the H7000 meters, the RHA probes make a multifunctional device for hand held relative humidity measurement of wide application.



Technical specifications

| Input | |
|---|--|
| RH input range | 0 to 100 %RH |
| Temperature input (optional) | Pt100: -10 to +50 °C |
| Output | |
| Output type Output range | Voltage min. 0 to max. 100 mV DC |
| Linearity | to measured value |
| Accuracy | |
| <i>Measurement error for RH Non-linearity Temperature drift Measurement error for T</i> | 2.5 % from span within measurement error 0.1 % from span for 1 °C 0.5 % from span |

| Power supply | |
|----------------------------|---------------------------------|
| Voltage | from the hand held meter: 5 VDC |
| Maximum allowed variations | 20 mV p-p @ 50Hz |
| Operating conditions | |
| Operating temperature | -10 to +50 °C |
| Storage temperature | -20 to max. +80 °C |
| Operating humidity | connector: 0 to 85 %RH |
| Design and materials | |
| Case material | Stainless steel |
| Wiring | Cable 1 m with socket |
| Dimensions | Ø12 x 120 mm (without cable) |
| Weight | 30 g (without cable) |
| Protection class | IP-65 (except the sensor) |

