



316-161 / 316-163 / 316-165

Miniature Relative Humidity Transmitter

The HX-748 Relative Humidity Transmitters provides a linear 0-1 V output signal directly proportional to 0-100% RH. This unit is ideal for OEM applications such as environmental test chambers, growth chambers, dough proofers, food holding cabinets and incubators. The compact size and durability makes the HX-748 the ideal choice for monitoring and controlling humidity in paper, food, ceramic, wood and textile manufacturing processes.

The humidity sensor is a time proven thin-film polymer capacitor which varies dielectric constant directly proportional to the surrounding relative humidity. The sensor recovers from condensation and is assembled in a stainless steel housing for operation up to 150 °C. The probe is connected to state of the art SMT signal conditioning circuitry through 90 cm of shielded Teflon cable. The circuitry is housed in a standard DB25 Sub-D connector. The transmitter operates on 3 wires: power, signal and ground.



The HX-748 comes in 3 models: a standard ø8 mm model, a 1/8" NPT thread model and a flange mount model. Accuracy is ±3% from 30-80% RH and hysteresis is less than 1% RH. Certification is available to NAMAS traceable standards and conform to CE requirements for EMI. The HX-748 is simple to install, accurate and reliable. This transmitter is the most cost effective solution for OEM and industrial humidity measurement requirements available.

Specifications

Humidity Transmitter

Range	0-100% RH
Output	0-1 V
Working range	5-95% RH
Accuracy @ 25 °C	±3% RH from 30-80% RH
Response time	less than 60 sec. (90% of change)
Stability	±2% RH, 24 months typical, depending on environmental conditions

Probe

Dimensions	36 x ø8 mm
Material	AISI 316 Stainless Steel
Cable	900 mm shielded Teflon cable

Operating temperature -40..+150 °C

Electronics

Housing	DB25 Sub-D connector Male
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Supply voltage 5-16 Vdc

Operating temperature -20..+60 °C