

Relative Humidity/Temperature Transmitters

Design Features

- RH / Temperature combination
- Linear 4-20mA output
- Advanced Ceramic Technology
- Accurate and reliable Temperature compensation
- Room, duct, outside air configurations

Model ACI/RH-TT



The ACI/RH-TT100 Relative Humidity transmitters, convert a resistance to a linear 4 to 20mA, 0 to 5 VDC, or 0 to 10 VDC output. The current signal may be transmitted over long distances on unshielded twisted-pair wire. The current signal will not be affected by the lead wire resistance or electrical noise.

The Advanced Ceramic Technology design overcomes the limitations of other resistance-based humidity sensors that utilize water soluble polymer coatings. The Advanced Ceramic Technology enables these sensors to recover fully from condensation. This allows the sensor to maintain its accuracy over a longer period of time. Despite its accuracy, the Advanced Ceramic Technology sensor and related circuitry is economical.

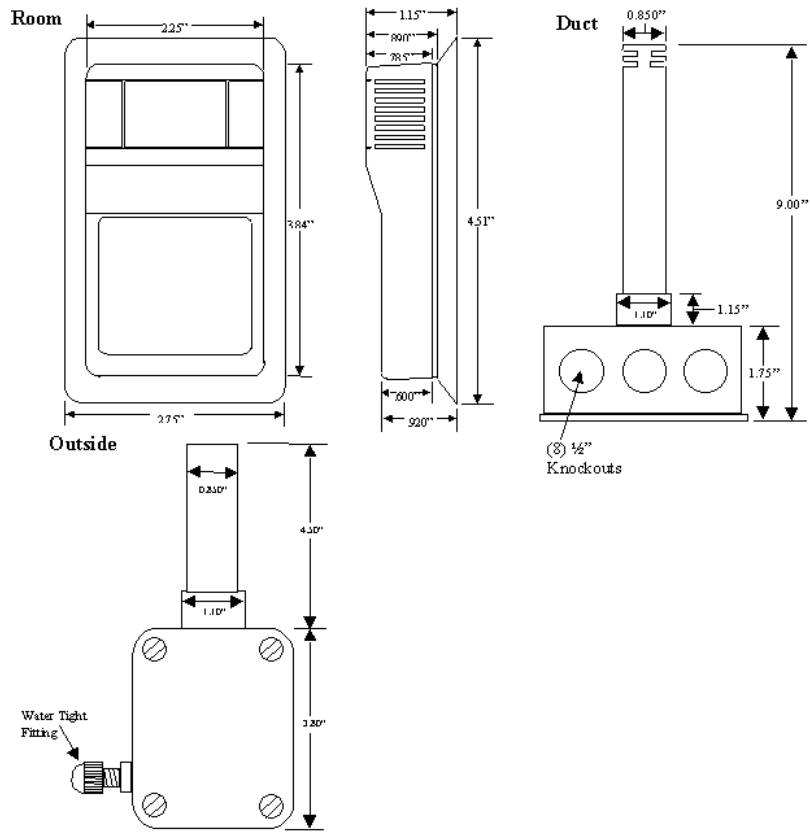
Accuracy is maintained over the entire operating range, using a thermistor for temperature compensation. Precision production tolerances maintain sensor interchangeability to within +/-3% nominal without recalibration. Each ACI/RH-TT100 Series humidity transmitter is calibrated at 3 different points, using an NIST Traceable Humidity Chamber.

Specification

Supply Voltage	250 Ohm Load: 15 to 36 VDC/24VAC	Response	30 seconds for 63% step
	500 Ohm Load: 17 to 36 VDC/24 VA		Saturation Respons
Operating Range	-10 to 160 (-23.3 to 71)	Operating RH	0 to 100% RH
Output	2-wire, 4 to 20mA or 3-wire,	Sensitivity	0.1% RH
	0-5 or 0-10 VDC		Interchangeability
Accuracy	+/- 2, 3, or 5% from 20 to 95% RH	Repeatability	0.5%RH
Long Term Stability	Less than 2% RH Drift / 5 Years	Hysteresis	< 0.4%RH

Due to ongoing research and product improvement, specifications are subject to change without notice.

Dimensions



Order Information

ACI/RH - - TT100 - -

Model

Accuracy
 5: ± 5%
 3: ± 3%
 2: ± 2%

Temperature Sensor
 0 to 50 span

Configuration
 R: Room
 D: Duct
 O: Outside Air

Locally Distributed By