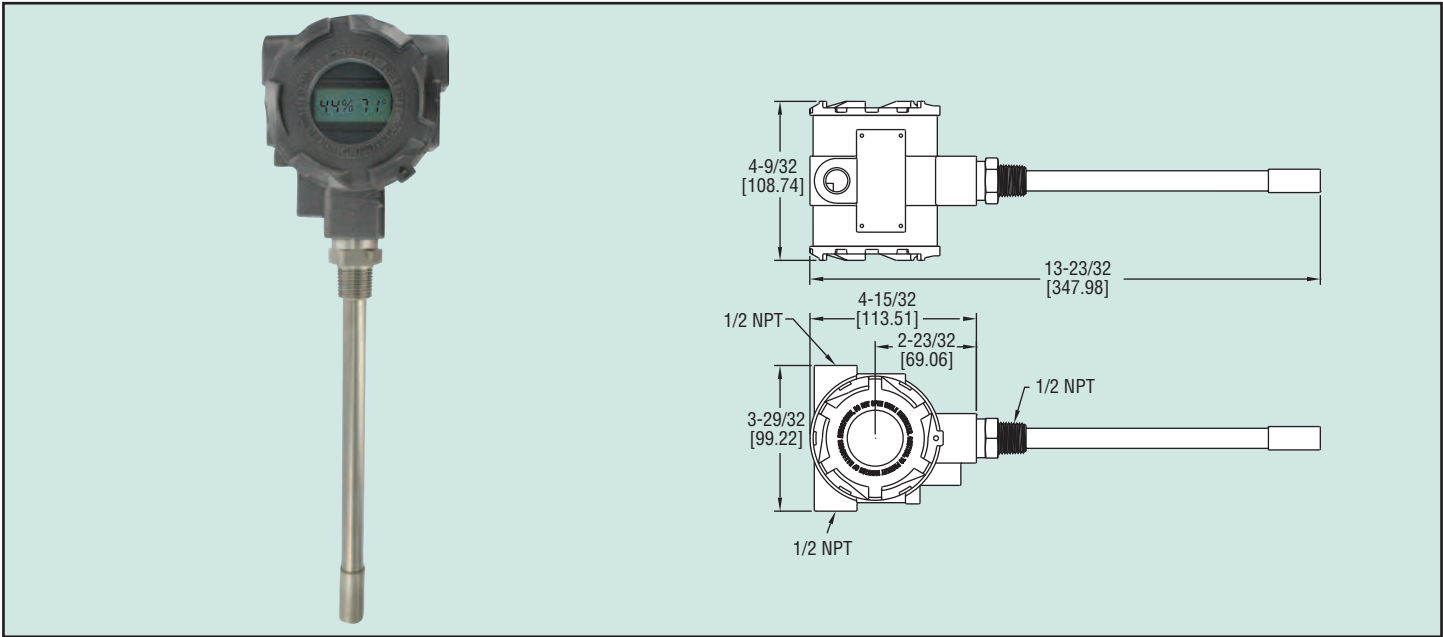




Series  
HHT

# Hazardous Area Humidity/ Temperature Transmitter

Intrinsically Safe or Explosion-Proof Models



The Series HHT Hazardous Area Humidity/Temperature Transmitter takes accurate measurements in the harshest of environments. The transmitter is offered in explosion-proof and intrinsically-safe versions depending on the application's requirements. The explosion-proof model is offered with 4 to 20 mA output for humidity only. The intrinsically-safe version is offered with 4 to 20 mA output for humidity and temperature. Both versions have an optional two line alphanumeric display to show the current humidity and temperature. The Series HHT humidity/temperature transmitter is excellent for offshore HVAC applications, dust and grain applications. Intrinsically safe models require an intrinsically safe barrier.

Model	Protection	Description	Display
HHT-EU	Explosion-Proof	Humidity	No
HHT-IU	Intrinsically Safe	Humidity	No
HHT-IT	Intrinsically Safe	Humidity/Temperature	No
HHT-EU-LCD	Explosion-Proof	Humidity	Yes
HHT-IT-LCD	Intrinsically Safe	Humidity/Temperature	Yes

#### ACCESSORIES

**KFD0-SCS-EX1.55** (see page 389), Loop powered galvanic isolator  
**A-287**, Mounting bracket for pipe or surface mounting  
(Includes bracket and two 2" U-bolts)

#### SPECIFICATIONS

**Relative Humidity Range:** 0 to 100% RH.  
**Temperature Range:** -40 to 140°F (-40 to 60°C).  
**Accuracy:** ±2% 10-90% RH, ±0.9°F at 72°F (±0.3°C at 25°C).  
**Hysteresis:** ±1%.  
**Repeatability:** ±0.1% typical.  
**Temperature Limits:** -40 to 140°F (-40 to 60°C).  
**Storage Temperature:** -40 to 176°F (-40 to 80°C).  
**Compensated Temperature:** -40 to 140°F (-40 to 60°C).  
**Power Requirements:** For intrinsically safe models HHT-IX, 9.5 to 28 VDC. For explosion-proof models HHT-EX, 16.5 to 28 VDC.  
**Output Signal:** 4-20 mA, 2 channels for humidity/temperature models (loop power on RH).  
**Response Time:** 15 seconds.  
**Electrical Connections:** Screw terminal block.  
**Conduit Connection:** 1/2 female NPT.  
**Drift:** <1% RH/year.  
**RH Sensor:** Capacitance polymer.  
**Temperature Sensor:** Solid state band gap.  
**Housing Material:** Aluminum.  
**Display:** Optional 2 line alpha numeric, 8 characters/line. Temperature display is °F/°C selectable.  
**Display Resolution:** RH: 0.1%; Temperature 0.1°F (0.1°C).  
**Weight:** 2 lb 8 oz (1134 g).  
**Enclosure Rating:** NEMA 4X (IP66). Models HHT-EX: FM Explosion-Proof, Class I Div. 1 Group B, C, D, Class II Div. 1 Group E, F, G, Class III Div. 1; Models HHT-IX: FM Intrinsically Safe, Class I Div. 1 Group A, B, C, D, Class II Div. 1 Group E, F, G, Class III Div. 1 T4.  
**Agency Approvals:** FM, CE.

AIR QUALITY

Humidity/Temperature  
Transmitters