TELAIRE®

HumiTrac™ XR

Telaire® Dew Point, Enthalpy, Wet Bulb, and Temperature Transmitters

Features

- Microprocessor-based signal processing
- Excellent accuracy
- Weather resistant duct and outside air mounting
- Easy to install
- Field-replaceable RH sensor saves time
- Multiple user selectable outputs
- Robust, proven capacitive sensor technology
- Attractive, modern look and rugged packaging
- Versatile temperature measurement
- Temperature compensated
- Low cost of ownership, very economical
- Two-year transmitter warranty and one year sensor warranty
- RoHS compliant

Benefits

- Improves indoor air quality (IAQ)
- Saves energy
- Helps prevent mold growth
- Provides a more comfortable environment
- Helps prevent condensation within a building
- Supplies more useful information on the indoor/outdoor environment to help building operators make better decisions
- Optimizes industrial environments like pharmaceutical plants and clean rooms

Amphenol

Advanced Sensors

Maximum Flexibility

HumiTrac XR is designed to be highly configurable in the field or in your warehouse. By minimizing the necessary number of configurations, we reduce distributor inventory costs and provides maximum flexibility to the installer. All versions feature field-selectable outputs (0 to 5V, 0 to 10V, 4 to 20mA). Simple adjustment of slide switches is all that is required. Signal-conditioned temperature versions are available scaled from -20°F to 120°F (-28.8°C to 49°C) for duct mount and outside air configurations, or 40°F to 90°F (4.4 to 32.2°C) for space mount configuration. Custom ranges are available upon request for high volume applications.

HumiTrac XR is offered in wall mount, duct mount and outdoor air configurations

Rugged, Attractive Enclosures

All HumiTrac XR configurations feature rugged flame retardant, UL-94V ABS plastic. Duct and outdoor air versions provide excellent weather resistance (IP42 rated). Special care has been taken in the design of the wall mount enclosure to provide enhanced airflow, increasing sensor response time and virtually eliminating the potential of "self-heating" by transmitter electronics that can lead to decreased accuracy measurements.

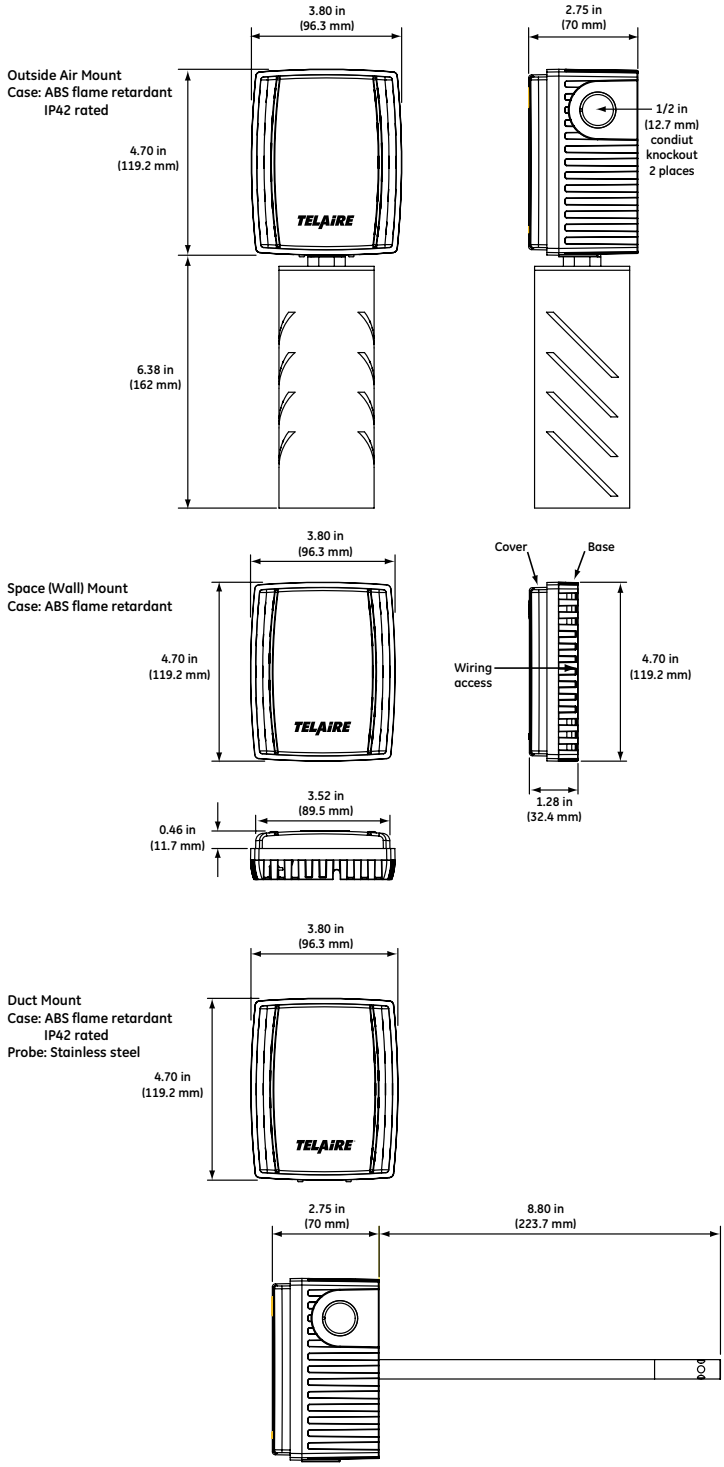
Simple, Fast Installation

All HumiTrac XR models feature large removable, pluggable terminal blocks, eliminating the need to wire in a confined space and allow the unit to be pre-wired separate from the electronics, an especially attractive feature in unfinished construction, where exposed sensors and electronics could be damaged by moisture, drywall dust and paint. All models incorporate a retaining wire that attaches the cover to the base, allowing the installer to wire the unit without using an extra hand to hold the cover.

Lowest Cost of Ownership

With a two-year warranty*, simplified inventory management, reduced installation times and field-serviceability, HumiTrac XR sets the standard in reduced cost of ownership and performance-to-price ratio.

**Transmitter only, one year warranty on replaceable sensor.*



Outside Air Mount
Case: ABS flame retardant IP42 rated

Space (Wall) Mount
Case: ABS flame retardant

Duct Mount
Case: ABS flame retardant IP42 rated
Probe: Stainless steel

HumiTrac XR Specifications

Operating Range
- -40°F to 140°F (-40°C to 60°C)
- 0% to 99% RH (non-condensing)

Storage Temperature
-67°F to 185°F (-55°C to 85°C)

Sensing Element
Capacitive polymer sensor

Long Term Stability
Less than 1% drift per year, typical

Temperature Effect**
Delta %RH = (0.0014 x %RH + 0.1325) x T°C - (0.0317 x %RH + 3.0876)
***Not applicable to signal-conditioned temperature units.*

Signal Outputs
4 to 20mA, 0 to 5V or 0 to 10V (user selectable)

Space (Wall Mount) Range
Dew Point	40° to 90°F (4.4 ° to 32.2°C)
Enthalpy	0-50 BTU/lb (0 to 116.3 kJ/kg)
Wet Bulb	40° to 90°F (4.4 ° to 32.2°C)
Dry Bulb	40° to 90°F (4.4 ° to 32.2°C)

Duct Mount/Outside Air Range
Dew Point	-20° to 120°F (-28.8° to 49°C)
Enthalpy	0-50 BTU/lb (0 to 116.3 kJ/kg)
Wet Bulb	0° to 100°F (-17.8° to 37.8°C)
Dry Bulb	-20° to 120°F (-28.8° to 49°C)

Accuracy at 77°F (25°C) at RH 40-90%
Dew Point	±1.8°F (±1°C)
Enthalpy	±2 BTU/lb (±4.7 kJ/kg)
Wet Bulb	±3°F (±1.7°C)
Dry Bulb	±0.5°C (±0.9°F)

Power Requirements

Supply Voltage
12 to 30 VDC

Maximum Load (current output only)
$$\Omega = \frac{\text{Supply Voltage} - 10}{0.02}$$

General

Protection
IP42 rating for Duct Mount and Outside Air Transmitters

Ordering Information

Model	Range	Product Description
Space (Wall Mount)		
HUMI-DP-XR-S	40° to 90°F (4.4° to 32.2°C)	DEW POINT TRANSMITTER- SPACE MOUNT
HUMI-EN-XR-S	0-50 BTU/lb	ENTHALPY TRANSMITTER- SPACE MOUNT
HUMI-WB-XR-S	40° to 90°F (4.4° to 32.2°C)	WET BULB TRANSMITTER- SPACE MOUNT
Duct Mount		
HUMI-DP-XR-D	-20° to 120°F (-28.8° to 49°C)	DEW POINT TRANSMITTER- DUCT MOUNT
HUMI-EN-XR-D	0-50 BTU/lb	ENTHALPY TRANSMITTER- DUCT MOUNT
HUMI-WB-XR-D	0° to 100°F (-17.8° to 37.8°C)	WET BULB TRANSMITTER- DUCT MOUNT
Outside Air		
HUMI-DP-XR-O	-20° to 120°F (-28.8° to 49°C)	DEW POINT TRANSMITTER-OPEN AIR
HUMI-EN-XR-O	0-50 BTU/lb	ENTHALPY TRANSMITTER- OPEN AIR
HUMI-WB-XR-O	0° to 100°F (-17.8° to 37.8°C)	WET BULB TRANSMITTER- OPEN AIR

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