## **Bid Specification**

2024-02-28

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## HMD62 Humidity and Temperature Duct Mount Transmitter for Building Automation Applications



HMD62 with standard length probe (left), HMD62 with short length probe (right)

## Features/Benefits:

- Vaisala HUMICAP® R2 Sensor for excellent accuracy and long-term stability, negligible hysteresis and resistance to dust and most chemicals
- Relative humidity measurements from 0 ... 100 % RH with accuracy up to ± 1.5 %RH
- Temperature measurements from -40 ... +80 °C (-40 ... +176 °F) with accuracy up to ± 0.1 °C (± 0.18 °F)
- (2) configurable 4...20mA analog outputs, loop powered
- Humidity parameter selection using DIP switches (dew point, enthalpy, wet-bulb temperature)
- IP66 rated cast aluminum housing with stainless steel probe
- Compatible with Vaisala's Insight PC Software through USB connection
- Traceable calibration certificate included

## Summary:

Duct mounted transmitter shall incorporate a thin-film polymer capacitive HUMICAP® R2 relative humidity sensor that is field replaceable (re-calibration in the field is required after replacement). Accuracy to be  $\pm$  1.5 %RH for the 0 ... 90 %RH range, and  $\pm$  2.5 %RH for the 90 ... 100 %RH range between 0 ... +40 °C (+32 °F ... +104 °F). Temperature dependent effects of the sensor shall not add more than 1 %RH additional error at the maximum and minimum operating temperatures. Humidity sensor shall have  $T_{63}$  response time of 15 s at +20 °C (+68 °F) and a stability of  $\pm$  0.5 %RH per year in typical HVAC applications. Temperature sensor to be a platinum 1000  $\Omega$  RTD. Accuracy of temperature sensor to be  $\pm$  0.1 °C ( $\pm$  0.18 °F) at +20 °C (+68 °F). Electronics to be protected in an IP66 enclosure. Transmitter to be powered by 10 ... 35 VDC ( $R_L$  = 0  $\Omega$ ) or 20 ... 35 VDC ( $R_L$  = 600  $\Omega$ ) and provide (2) linear output signals of 4 ... 20 mA corresponding to 0 ...100 %RH and -20 ... +80 °C (-4 ... +176 °F), while operating over a temperature range of -40 ... +80 °C (-4 °F ... +176 °F). Transmitter to be available with "standard" or "short" length probe for installation in various duct sizes. Transmitter shall have the ability to calibrate relative humidity, without disturbing operation, using a single point electronic field calibrator or adjustment trimmers. Traceable calibration certificate included.

**Note:** The HMD62 is a pre-configured model of the HMD60 Series. The HMD60 Series offers additional pre-configured models, as well as models to be fully configurable (output signals, output parameters, probe length, etc.).