

## **Bid Specification**

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## HMD83 Humidity and Temperature Duct Mount Transmitter for Building Automation Applications





## Features/Benefits

- Reliable transmitters for basic HVAC humidity measurements
- Relative humidity measurement accuracy up to ± 3.0 %RH
- Temperature measurement accuracy up to ± 0.5 °C (± 0.9 °F)
- 3-wire, 0 ... 10 V output signals
- User exchangeable INTERCAP® sensor for easy field replacement
- Optional display available with HMD83D model
- Optimized for easy installation and low maintenance
- IP65 rated enclosure
- Output parameters available: relative humidity, temperature, dew point temperature, wet-bulb temperature, and enthalpy
- Note: DIP switches available on HMD83 & HMD83D to control humidity output parameter and scaling

## **Summary:**

Duct mounted transmitters shall incorporate a thin-film polymer capacitive INTERCAP® relative humidity sensor. Sensor is to be interchangeable in the field without requiring calibration. Accuracy is to be  $\pm 3$  %RH from 0... 90 %RH and  $\pm 5$  %RH from 90 ... 100 %RH between  $\pm 10$  ...  $\pm 30$  °C ( $\pm 50$  ...  $\pm 86$  °F). Sensor to have a stability of  $\pm 2$  %RH over a two year period in typical HVAC conditions. Temperature sensor shall be a platinum  $\pm 1000$   $\pm 100$  RTD with a linear output of 0 ... 10 V corresponding to  $\pm 100$  °C ( $\pm 100$  °C ( $\pm 100$  °C ( $\pm 100$  °C) with an accuracy of  $\pm 100$  °C ( $\pm 100$  °C) at  $\pm 100$  °C ( $\pm 100$  °C). Transmitter to be powered by 18 ... 35 VDC or 24 VAC  $\pm 100$  °C ( $\pm 100$  °C) and provide a linear output signal of 0 ... 10 V corresponding to 0 ... 100 %RH. Shall have options to calculate and output additional parameters: dew point temperature, wet-bulb temperature, and enthalpy. Available models are listed below:

Vaisala Model: HMD83 (Relative Humidity and Dry-Bulb Temperature)

Vaisala Model: HMD83D (Relative Humidity and Dry-Bulb Temperature with Display)

Vaisala Model: TMD83 (Dry-Bulb Temperature Only)

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