

## **Bid Specification**

1(1)

2019-04-18

## HMD82 Humidity and Temperature Duct Mount Transmitter for Building Automation Applications



## Features/Benefits:

- Reliable transmitters for basic HVAC humidity measurements
- ±3.0 %RH accuracy
- Optimized for easy installation and low maintenance
- User exchangeable INTERCAP® sensor for easy field replacement
- Output parameters: relative humidity and temperature with optional dewpoint temperature, wet bulb temperature and enthalpy

## Summary:

Duct mounted transmitters shall incorporate a thin film polymer capacitive INTERCAP® relative humidity sensor. Sensor to be interchangeable in the field and calibration free. Accuracy is  $\pm 3\%$  RH from 0 and 90% RH and  $\pm 5\%$  from 90 to 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. Transmitter shall operate over a humidity range of 0...100%. Transmitter to be loop powered by 10... 28 VDC (at 0 $\Omega$  load) or 20...28VDC (at 600 $\Omega$  load) and provide a linear output signal of 4...20 mA corresponding to 0 to 100% RH. Temperature sensor shall be a platinum 1000 $\Omega$  RTD with a linear output of 4...20 mA corresponding to  $\pm 40\%$  to  $\pm 40\%$  to  $\pm 40\%$  with an accuracy of  $\pm 0.3\%$  C (0.54° F) at 20°C ( $\pm 60\%$ F). Shall have options to calculate and output additional parameters: dew point temperature, wet bulb temperature, and enthalpy.

Vaisala Model: HMD82 (Relative Humidity and Temperature)

Vaisala Model: HMD82D (Relative Humidity and Temperature with Display)

Vaisala Model: TMD82 (Temperature Only)

Vaisala Model: HMD82TD (Dew point and Temperature)
Vaisala Model: HMD82W (Wet bulb and Temperature)
Vaisala Model: HMD82H (Enthalpy and Temperature)