

## **Bid Specification**

2024-02-28 1 (1)

## HMW88 Humidity and Temperature Transmitter for Building Automation Applications



## Features/Benefits:

- Reliable wall-mounted transmitter for basic HVAC humidity measurements
- Relative humidity measurement accuracy up to ± 3.0 %RH
- Temperature measurement accuracy up to ± 0.3 °C (± 0.54 °F)
- Loop-powered, 4 ... 20 mA output signals
- User exchangeable INTERCAP® sensor for easy field replacement; optimized for easy installation and low maintenance
- Optional display available with HMW88D model
- IP65 rated enclosure
- Output parameters available: relative humidity, temperature, dew point temperature, wet-bulb temperature, enthalpy
- Note: DIP switches available on HMW88 & HMW88D to control humidity output parameter and scaling

## Summary:

Wall-mounted transmitters shall incorporate a thin-film polymer capacitive INTERCAP® relative humidity sensor. Humidity sensor is to be calibration free and interchangeable in the field. Instrument must be able to measure 0 ... 100 %RH with accuracy of  $\pm$  3% RH from 0 ... 90 %RH and  $\pm$  5 %RH from 90 ... 100 %RH between +10 ... +30 °C (+50 ... +86 °F). Humidity sensor must have a stability of at least  $\pm$  2 %RH over a two year period in typical HVAC applications. Temperature sensor shall be a platinum 1000  $\Omega$  RTD with a linear output of 4 ... 20 mA corresponding to -40 ... +60 °C (-40 ... +140 °F) with an accuracy of  $\pm$  0.3 °C ( $\pm$  0.54 °F) at +20 °C (+68 °F). Transmitter is to be loop powered by 10 ... 28 VDC (at 0  $\Omega$  load) or 20 ... 28 VDC (at 600  $\Omega$  load) and provide a linear output signal of 4 ... 20 mA corresponding to 0 ... 100 %RH. Instrument must have options to calculate and output additional parameters such as: dew point temperature, wet-bulb temperature, and enthalpy. Available models are listed below:

Vaisala Model: HMW88 (Relative Humidity and Dry-Bulb Temperature)

Vaisala Model: HMW88D (Relative Humidity and Dry-Bulb Temperature with Display)

**Vaisala Model:** <u>HMW88TD</u> (Dew point and Dry-Bulb Temperature)

Vaisala Model: HMW88W (Wet-Bulb Temperature and Dry-Bulb Temperature)

Vaisala Model: HMW88H (Enthalpy and Dry-Bulb Temperature)

Vaisala Model: TMW88 (Dry-Bulb Temperature Only)

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