

## **Bid Specification**

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2019-04-19

## **HMT338 Humidity and Temperature Transmitter for Pressurized Processes**



## Features/Benefits:

- Vaisala HUMICAP® sensor for superior accuracy and stability
- Graphical display and keypad for convenient operation
- Excellent performance in harsh conditions; good chemical tolerance
- Corrosion-resistant NEMA4 housing
- NIST traceable calibration (certificate included)
- Analog outputs, RS232/485, LAN
- MODBUS protocol support (RTU/TCP)
- Compatible with Vaisala viewLinc software
- Humidity parameter options: relative humidity, dew point/frost point, wet bulb temperature, enthalpy, absolute humidity, ppm, mixing ratio, vapor pressure, and saturation vapor pressure

## Summary:

Pipe mounted probe shall incorporate a thin film polymer capacitive HUMICAP® humidity sensor that is field replaceable and have accuracy of  $\pm 1\%$  RH (0...90% RH) and  $\pm 1.7\%$  RH (90...100% RH) at  $\pm 1.5\%$  C (59 ...  $\pm 77\%$  F). Temperature sensor shall be a platinum  $\pm 1.0\%$  RTD with a NIST traceable accuracy of  $\pm 0.2\%$  C (0.36%F) at  $\pm 20\%$  C (68%F). Electronics to be protected in a NEMA4 enclosure. Transmitter to be powered by  $\pm 10...35$  VDC,  $\pm 24$  VAC or optional  $\pm 100...240$  VAC and provide two linear selectable analog outputs of: 4 to 20 mA, 0 to 20 mA, 0 to 1 V, 0 to 5 V, or 0 to 10 V, as well as serial output of standard RS232C (optional RS  $\pm 485/422$  or Ethernet (LAN)). Transmitter shall also have the option for a third analog output. Remote probe shall have a measurement range of  $\pm 40\%$  to  $\pm 180\%$  C ( $\pm 40\%$  to  $\pm 180\%$  F), standard cable length to be 2 meters (optional 5 or 10 meters), and pressure rating of  $\pm 100\%$  C ( $\pm 40\%$  to  $\pm 100\%$  S). Transmitter shall be microprocessor based giving the option to calculate and directly output dew point, frostpoint, absolute humidity, wet bulb temperature, mixing ratio, enthalpy, ppm (volume or weight), partial pressure of water vapor, and saturation vapor pressure. Transmitter shall also have the option of incorporating a local graphical/numerical display in its cover. Transmitter shall be able to be calibrated, without disturbing operation, using a single point electronic transfer standard. NIST traceable calibration certificate included.

Vaisala Model HMT338 Order Guide