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HMS82 Humidity and Temperature Outdoor Transmitter for Building Automation Applications



Features/Benefits:

- Reliable transmitters for basic HVAC humidity measurements
- ± 3.0 %RH accuracy
- User exchangeable INTERCAP® sensor for easy field replacement
- Output parameters: relative humidity and temperature with optional dewpoint temperature, wet bulb temperature and enthalpy
- Shield protects temperature and humidity probes from scattered, as well as, direct solar radiation and rain
- Easy to install on a pole, horizontal beam or flat surface

Summary:

Outdoor mounted transmitter shall incorporate a thin film polymer capacitive INTERCAP® relative humidity sensor. Sensor is calibration free. Electronics to be protected in a NEMA4 enclosure. Transmitter probe integrated in a naturally aspirated solar radiation and precipitation shield. Accuracy is $\pm 3\%$ RH from 0 and 90% RH and $\pm 5\%$ from 90 to 100% RH between $+10 \dots +30$ °C ($+50 \dots +86$ °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 Ω load) or 20...28VDC (at 600 Ω load) and provide a linear output signal of 4...20 mA corresponding to 0 to 100% RH. Temperature sensor shall be a platinum 1000 Ω RTD with a linear output of 4...20 mA corresponding to -40° to 60° C (-40° to 140° F) with an accuracy of $\pm 0.3^{\circ}$ C (0.54° F) at 20° C (68° F). Shall have options to calculate and output additional parameters: dew point temperature, wet bulb temperature, and enthalpy.

Vaisala Model: HMS82 (Relative Humidity and Temperature)

Vaisala Model: HMS82C (Relative Humidity and Temperature with NPT 1/2" conduit fitting)

Vaisala Model: HMS82TD (Dew point and Temperature)

Vaisala Model: HMS82W (Wet bulb and Temperature)

Vaisala Model: HMS82H (Enthalpy and Temperature)

Vaisala Model: TMS82 (Temperature Only)