# HMW95 Humidity and Temperature Transmitters for High Performance Building Automation Applications



## Features/Benefits:

- Uses Vaisala HUMICAP® 180R humidity sensor
- Optional display available for local measurement readout
- Full 0 ...100 %RH range with accuracy up to ± 1.7 %RH
- Temperature accuracy up to ± 0.2 °C
- Digital output supporting Modbus® RTU protocols
- Dip switch configuration for digital output settings
- Moisture parameters available: Relative humidity, dew point, mixing ratio, enthalpy, wet-bulb temperature, dew point depression, and absolute humidity
- Discrete wiring through back plate
- User exchangeable humidity and temperature modules
- Simplified on site calibration options and adjustment through offset trimmers or PC connection
- Traceable calibration certificate included

## Summary:

Wall mounted transmitter shall incorporate a thin-film polymer capacitive HUMICAP® relative humidity sensor. Transmitter shall be rated for full range of 0 ... 100 %RH with accuracy of ± 1.7 % RH in the range of 0 ... 90 %RH and ± 2.5 %RH in the range of 90 ... 100 %RH for temperatures between +10 … +40 °C (+50 … +104 °F). Instrument shall be rated for temperatures between −5 … +55 °C (+23 … +131 ºF) with temperature measurement accuracy of ± 0.2 °C between +20 … +30 °C (+68 … +86 °F). Temperature sensor shall be digital. Transmitter to be powered by 18 … 35 VDC or 24 VAC ± 20 % 50/60 Hz and provide an RS-485 output signal supporting Modbus® RTU protocol. Mechanical housing of transmitter shall be rated to IP30. Transmitter shall have the option to calculate and output parameters such as: relative humidity, temperature, dew point, mixing ratio, enthalpy, wet-bulb temperature, dew point depression, and absolute humidity. Transmitter shall have the ability to calibrate relative humidity, without disturbing operation, using a single point electronic field calibrator, or have an interchangeable humidity and temperature module with traceable calibration for easy maintenance. Traceable calibration certificate included. Available models are listed below:

**Vaisala Model:** HMW95 (Relative Humidity and Dry-Bulb Temperature)

**Vaisala Model:** HMW95D (Relative Humidity and Dry-Bulb Temperature with Display)

***Note:*** *The HMW95 consists of pre-configured models that are a part of the HMW90 Series. The HMW90 Series offers additional pre-configured models, as well as models to be fully configurable (output signals, output parameters, output scaling, etc.).*

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