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HMT120 Humidity and Temperature Transmitters for Cleanrooms and Light Industrial Applications



Features/Benefits:

- Vaisala HUMICAP® technology with humidity sensor HUMICAP® 180R
- Interchangeable probe (easy field calibration)
- Resistant to dust and most chemicals
- Optional two line LCD display
- USB cable available for a PC connection for maintenance
- Mounting options: wall, remote or outdoors
- NEMA4 enclosure suitable for wash-down areas
- Humidity parameter options: relative humidity, dew point/frostpoint, wet bulb temperature, enthalpy, absolute humidity, mixing ratio, vapor pressure, and saturation vapor

Summary:

Wall, remote or outdoor mounted transmitter shall incorporate a thin film polymer capacitive HUMICAP® relative humidity sensor. Electronics shall be protected from: condensation, chemicals and dust in a NEMA-4 enclosure. Sensors to be able to withstand wash down with no lasting detrimental effect to transmitter performance. Accuracy to be $\pm 1.5\%$ RH for the 0 to 90% RH range, and $\pm 2.5\%$ RH for the 90 to 100% RH range between 0 to 40°C (32 to 104°F). Shall have a typical stability of $\pm 0.5\%$ RH per year. Transmitter will be powered by loop power 10 to 30 VDC ($R_L = 0\Omega$) or 20 to 30 VDC ($R_L < 500\Omega$). Transmitter with optional display shall operate over a temperature range of -20° to 60°C (-4° to +140°F) and transmitter without display shall operate -40° to 60°C (-40° to +140°F). Transmitter shall have a linear output signal of 4 to 20 mA corresponding to 0 to 100% RH (dewpoint, enthalpy, wet bulb optional). Optional temperature sensor to be a platinum 1000 Ω RTD having a linear output signal of 4 to 20 mA corresponding to -40° to 60°C (-40° to +140°F) for fixed probe and -40° to 80°C (-40° to +176°F) for remote probe. Accuracy to be $\pm 0.1^\circ\text{C}$ (0.18°F) at +15...25 °C (+59 ... +77 °F). Probes shall be interchangeable for minimal maintenance downtime. Transmitter shall also have the ability to calibrate relative humidity, without disturbing operation, using a single point electronic field calibrator. NIST traceable calibration certificate included. Shall have an optional solar radiation and precipitation shield for outdoor mounting.

Vaisala Model HMT120 [Order Guide](#)