



HUM Series - Temperature / Humidity Sensors

Part No. [HUM-D-100](#)Part No. [HUM-W-100](#)Part No. [HUM-W-100-DSP-F](#)Part No. [HUM-R-20](#)

ProSense HUM temperature and humidity sensors are engineered for reliability and accuracy. These versatile transducers feature built-in temperature and humidity sensors, delivering accurate measurements across a wide range: -19.9 to +60.0 °C or -4 to +140 °F for temperature and 0.0 to 99.9% RH for humidity. With flexible installation options including room, duct mount, and wall mount constructions, units can be seamlessly used in a variety of applications. The UHM series offer variable depth installation using mounting bracket included with probe units. Display models feature a clear 7-segment LED display for real-time monitoring and are available in Celsius or Fahrenheit. The units are perfect for HVAC, cleanrooms, and industrial applications requiring performance and easy integration.

Features

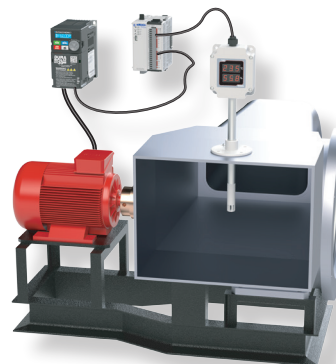
- Versatile room, duct, and wall mount constructions
- 100 mm or 200 mm probe lengths on duct and wall mount units
- 7-segment LED Display on certain models
- Wide temperature and humidity sensing ranges
- Two 4-20 mA outputs for temperature (Pt100 for HUM-R-PT) and humidity
- Built-in 2 m cable for duct and screw terminals for wall mount units



Application Examples



Monitor humidity and temperature in areas that require specific conditions.



Control processes based on humidity and temperature.



HUM Series - Temperature / Humidity Sensors

HUM Series - Temperature / Humidity Sensors Selection Guide

Part Number	Sensor Type	Insertion Length (mm)	Output	Temperature Sensing Range	Relative Humidity	Display	Displayed Temperature Range	Connection	Weight (lb)	Drawing Link	Price
HUM-D-100	Side insertion	100	2-channel, current, 4-20 mA	-19.9 to +60 °C [-4 to +140 °F]	0 to 99.9%	N/A	N/A	6.5 ft [2 m], 22 AWG wire leads	0.97	PDF	\$209.00
HUM-D-200		200							1.03	PDF	\$209.00
HUM-W-100	Bottom insertion	100							0.97	PDF	\$209.00
HUM-W-200		200							1.03	PDF	\$209.00
HUM-W-100-DSP-C		100				2-line, 3-digit red LED	-19.9 to +60 °C		1.00	PDF	\$241.00
HUM-W-200-DSP-C		200					1.07		PDF	\$241.00	
HUM-W-100-DSP-F		100					-4 to +140 °F		1.00	PDF	\$241.00
HUM-W-200-DSP-F		200					1.07		PDF	\$241.00	
HUM-R-20	Wall mount	N/A	2-channel (1) current, 4-20 mA, (1) Pt100. Ω			N/A	N/A	Screw terminals	0.19	PDF	\$180.00
HUM-R-PT									0.19	PDF	\$180.00

HUM Series - Temperature / Humidity Sensors General Specifications

Power Supply	24 VDC
Permissible Voltage Range	90 to 110% of rated voltage
Power Consumption	≤ 2.4 W
Dielectric Strength	500 VAC, 50/60 Hz for 1 min
Noise Immunity	± 0.3 kV the square wave noise (pulse width: 1 μs)
Vibration	0.75 mm amplitude at 10 to 55 Hz in X, Y, Z direction for 1 hr
Vibration (Malfunction)	0.5 mm amplitude at 10 to 55 Hz in X, Y, Z direction for 1 hr
Shock	30 G, 300 ms in each X, Y, Z direction
Shock (Malfunction)	10 G, 100 ms in each X, Y, Z direction
Temperature	Ambient: -20 to +60 °C [-4 to 140 °F], Storage: -20 to 60 °C [-4 to +140 °F]: non-condensing
Certification	CE



Scan the QR Code above or click to view the ProSense HUM series insert.



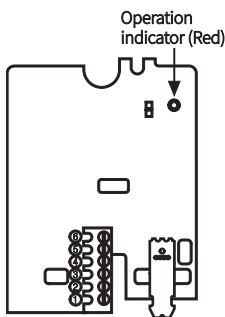
HUM Series - Temperature / Humidity Sensors

HUM Series - Temperature / Humidity Sensors Specifications										
Model	<u>HUM-D-100</u>	<u>HUM-D-200</u>	<u>HUM-W-100</u>	<u>HUM-W-200</u>	<u>HUM-W-100-DSP-C</u>	<u>HUM-W-200-DSP-C</u>	<u>HUM-W-100-DSP-F</u>	<u>HUM-W-200-DSP-F</u>	<u>HUM-R-20</u>	<u>HUM-R-PT</u>
Sensor Type	Temperature / humidity sensor									
Sensor Response Time	10 seconds									
Display Type	Non-display type				7-segment LED display				Non-display type	
Display Digit	N/A				3 digits for temperature / 3 digits for humidity				N/A	
Temperature Measuring Range	-19.9 to +60 °C [-4 to +140 °F]									
Humidity Measuring Range	0.0 to 99.9% RH									
Temperature Accuracy	± 1.0 °C (at room temperature)						± 1.8 °F (at room temperature)		± 1.0 °C (at room temperature)	
Humidity Accuracy	Typ. ± 2% RH (10 to 90% RH, at room temperature) ≤ ± 2.5 % RH								± 3% RH (30 to 70% RH, at room temperature) ± 4% RH (10 to 90% RH)	
Temperature Output	DC 4-20 mA (allowable impedance: ≤ 600 Ω)									Pt100 Ω resistance value (TCR: 3850 ppm / °C)
Humidity Output	DC 4-20 mA (allowable impedance: ≤ 600 Ω)									
Resolution	1/1000									
Sampling Period	0.5 second									
Protection Structure	IP65 (IEC standards)								IP10 (IEC standards)	
Cable Specification	ø4 mm, 4-wire, length: 2 m								N/A	
Wire Specification	22 AWG (0.08 mm, 60-wire), insulator diameter: 1.25 mm								N/A	

For additional technical information and installation see insert link or scan QR code on previous page.

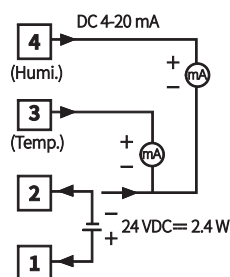
Wiring

Screw Terminal Connection Models

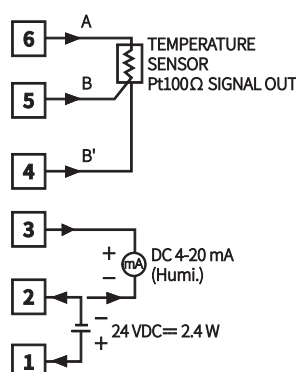


Power & Output terminal
Note: Terminal wire size: 16-24 AWG

HUM-R-20



HUM-R-PT



Cable Connection Models

HUM-D / W

