

# HUMITRAN

H U M I D I T Y   S E N S O R S

- State-of-the-Art capacitive thin film humidity sensor
- 100 ohm Platinum RTD temperature sensor
- Temperature compensated humidity output
- Factory calibrated
- Low cost

The HUMITRAN series provides a reliable, accurate, and low cost solution for monitoring relative humidity and temperature.

Solid state sensors supply excellent sensitivity, fast response and long-term stability. Simple hookup and linearized output permit interfacing with most display or control devices.

## Sensor-transmitters for Measuring and Controlling Relative Humidity and Temperature



**RH/TEMP TRANSMITTER**  
Model RHT-20C or RHT-10V



**RH TRANSMITTER**  
Model RH-20C or RH-10V



**RH/TEMP CONTROLLER**  
Model CSP-F1, CSP-C1,  
CSP-F2, CSP-C2

### AUTOMOTIVE

Engine Test Cells  
Emission Testing  
Paint Spray  
Passenger Environment

### MEDICAL

Pill Coating  
Operating Room  
Toxicology  
Testing

### FOOD PROCESSING

Freeze Drying  
Grain Silos  
Baking  
Poultry Industry

### MANUFACTURING

Plastics  
Printing  
Painting  
Adhesives

### STORAGE

Food  
Grain  
Paper  
Tobacco

### ENVIRONMENTAL

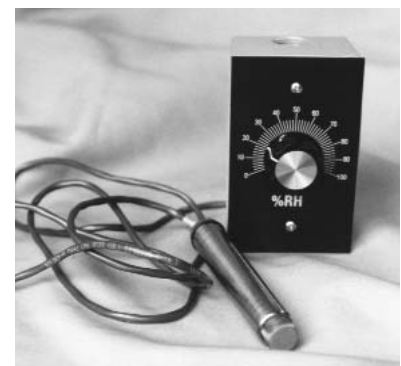
Heating, Ventilating  
Air Conditioning  
Computer Rooms  
Museums



**HIGH TEMP RH/TEMP  
PROBE TRANSMITTER**  
Model HTRH-D or HTRH-W



**RH/TEMP DUCT PROBE  
TRANSMITTER**  
Model RDP-20C or RDP-10V



**HUMIDITY CONTROLLER**  
Model RHS-1  
Model RH Setpoint Controller



YOUR GLOBAL SOURCE FOR TEST  
AND MEASUREMENT SOLUTIONS

## HUMITRAN-C

### RH/TEMP CONTROLLER

- **Included Probe may be Thousands of Feet from the Controller**
- **Recorder Outputs**
- **Dual Setpoints, Relay Outputs**
- **Digital Display of Setpoints, Deadbands, and Values**
- **1/8 DIN Metal Enclosure with Panel Mounting Bracket**

**Relative Humidity:** 3% RH to 95% RH range at  $\pm 2\%$  RH accuracy. Temperature compensated -10°F to +175°F. 1% RH display resolution.

**Temperature:** 0°F to 180°F range at  $0 \pm 1$  °F accuracy, 1° resolution (0°C to 85°C,  $\pm 0.6$ °C accuracy for °C version).

**Controls: Setpoints:** 0% RH to 100% RH, 0°F to 180°F. Deadbands; to  $\pm 50\%$  RH, to  $\pm 50$ °F ( $\pm 40$ °C) -all digitally displayed.

**Response Time:** Under 20 seconds.

**Setpoint Outputs:** Dual SPDT relays, 5 amp/250VAC contact rating.

**Recorder Outputs:** 10mv/%RH and 10mv/°F (10mv/°C).

**Display:** 0.56" high-brightness digits. Off-scale indication for open wires. Relay "ON" indicators.

**Input Power:** 115VAC $\pm 15\%$ , 50/60Hz, 5 watts maximum. 230V AC model available.

## HUMITRAN-RDP

### RH/TEMP DUCT PROBE TRANSMITTER

- **Adjustable, Removable Duct Flange**
- **Wall Mounting Bracket Provided**
- **RDP-20C (4 to 20ma) or RDP-10 (0 to 1V) Outputs**
- **Stainless Steel Housing**

**Relative Humidity:** 3% RH to 95% RH range at  $\pm 2\%$  RH accuracy. Temperature compensated -10°F to + 175°F .

**Temperature:** 0°C to 100°C (32°F to 212°F) range at  $\pm 0.6$ °C ( $\pm 1$ °F) accuracy for 4 to 20ma or 0 to 1V output.

**RH Output:** 4 to 20 ma or 0 to 1V represents 0% to 100% RH.

**Input Voltage Range:** 6 to 30VDC, polarity protected for both current and voltage output units.

**Response Time:** Under 10 seconds

## HUMITRAN- RHT & HUMITRAN RH

### RH/TEMP TRANSMITTER

- **Compact Wall Mounting**
- **NEMA Housing**
- **RHT-20C (4 to 20ma) or RHT-10V (0 to 1V) Outputs**
- **RH TRANSMITTER**
- **RH-20C (4 to 20ma) or RH-10V (0 to 1V) Outputs**

- **Smallest Size Wall Mount**
- **NEMA Housing**
- **Low Cost**

**Relative Humidity:** 3% RH to 95% RH range at  $\pm 2\%$  RH accuracy. Temperature compensated -10°F to +175°F.

**RH Output:** 4 to 20 ma or 0 to 1V represents 0% to 100% RH.

**Temperature:** -20°C to +75°C (-4°F to 167°F)  $\pm 0.6$ °C ( $\pm 1$ °F)

accuracy for 4 to 20ma or 0 to 1V output.

**Input Voltage Range:** 6 to 30VDC, polarity protected for both current and voltage output units.

**Response Time:** Under 10 seconds

## HUMITRAN RHS SERIES

### HUMIDITY CONTROLLER

- **Quality relative humidity set point controller**
- **Stainless steel probe (4.7" long x 3/4" diameter)**
- **State-of-the art thin film polymer sensor**
- **Recorder output of 0 to 1V (or 0 to 5V) for 0 to 100% RH input**

**Accuracy:** 3% RH, from 3% to 95% RH

**Operating Temperature Range:** Probe -20° to 85C. Controller 0° to 75°C.

**Recorder Output:** 10mV/%RH (50mV/%RH with resistor removed).

**Controller Output:** SPDT (Form "C") Relay; 5AMPS 250 VAC or 30 VDC.

**Bandwidth Control:**  $\pm 0$  to  $\pm 20\%$  RH, independent of Setpoint setting.

**Power:** 8VDC to 30 VDC at 125 milliamps maximum.

**Probe:** Stainless steel, .75" diameter, 4.7" long, 5'2-wire cable with bracket for wall mounting.

**Enclosure:** Controller mounted in standard metal "T" box (4.5" x 2.75" x 2" deep) screw terminal connectors.

## HUMITRAN HT SERIES

### HIGH TEMPERATURE RH/TEMP PROBE TRANSMITTER

- **Remote Stainless Steel Probes HTRH-W (2.5" Wall Mounted), HTRH-D (8.5" Duct Mounted)**
- **-40°C to 180°C (-40F to 356°F) Operating Range**
- **2% RH, 0.5°C Accuracies**

**Relative Humidity:** 3% RH to 95% RH range, +/- 2% RH

**Temperature:** -40° to 180°C at +/- 0.5°C. Time constant under 4 seconds.

**Power Inputs:** 7 to 30 VDC polarity protected.

**Outputs:** 4 to 20 mA, for 0 to 100% RH; 4 to 20mA, for -40°C to 180°C

