HT/HWS Series

Deluxe RH/T Transmitter with Thermostat/ Humidistat Functions

All **HT/HWS Series** institutional grade relative humidity/temperature (HT) transmitters are field-programmable and are designed to satisfy the demanding requirements of pharmaceutical labs, hospitals, science labs, and other exacting applications. Internal jumpers control access to a calibration offset feature which allows field adjustment of offsets to extend the calibration interval, and tampering can be prevented by setting a jumper to disable keypad program functions. All HT models are NIST traceable, rated for 1%, or 2% accuracy.

Analog Output Transmitter
Analog output models feature a keypad to make adjusting humidity and temperature setpoint values easy. They are unique in reporting the setpoint values back to a control system by means of 4-20mA, or 0-5V/0-10VDC (output selected by slide switch) signals. Dual outputs make it possible to control both humidity and temperature with one sensor.

Setpoint Relay Transmitter
The HT Series setpoint relay models measure both temperature and humidity in a single device, and offer thermostat or humidistat functionality. Two separate relays can be configured to control heat/cool in thermostat mode, or humidify/ de-humidify in humidistat mode.

HWS models offer humidity/humidistat functionality, without temperature measurement/control.

Applications

- Hospitals and operating rooms, pharmaceutical labs
- Clean rooms
- Food processing plants
- Environmental testing facilities, and other institutional applications

Features

- Independent RH and T (HT relay), or analog setpoint outputs (HT analog), provide application flexibility
- LCD for local display of readings and setup values
- Offset function extends calibration intervals for both RH and T (HT models)
- Switch selectable 4-20mA or 0-10V analog outputs

Easy to maintain accuracy

- Eight-point calibration to 1% or 2% RH, traceable to NIST (HT & HWS with NIST option)
- Replaceable RH sensor element supports field calibration offset. . .saves time
- Semiconductor temperature sensor can be field calibrated

ORDERING INFORMATION

RH/T Combination Device

	(Accuracy)	*(NIST)*	*(Setpoint)*	*(US or EU)*	*(Cal Certificate)*	*(Option)*
HT	[ ]	[N]	[ ]	[ ]	[ ]	[ ]
	1 = 1% **2** = 2%		**A** = Analog **R** = Relay	**S** = Standard **C** = CE	**0** = None **1** = 1 point Cal Validation **2** = 2 point Cal Validation	**B** = 100R Platinum, RTD **C** = 1k Platinum, RTD **D** = 10k T2, Thermistor **E** = 2.2k, Thermistor **F** = 3k, Thermistor **G** = 10k CPC Thermistor **H** = 10k T3, Thermistor **J** = 10k Dale, Thermistor **K** = 10k w/11k with Shunt,Thermistor **M** = 20k NTC, Thermistor **N** = 1800 ohm TAC, Thermistor **Q** = 1uA/C, Linitemp **R** = 10k US, Thermistor **S** = 10k 3A 221 **T** = 100k, Thermistor

Example:
HT [1] [N] [R] [C] [1] [H]

HT Series devices contain both humidity and temperature transmitter outputs. Optional RTDs and thermistors are available.

RH Only Device

	(Accuracy)	*(NIST)*	*(Setpoint)*	*(US or EU)*
HWS	[ ]	[ ]	[ ]	[ ]
	1 = 1% **2** = 2% **3** = 3% **5** = 5%	**N** = Nist **X** = No	**A** = Analog **R** = Relay	**S** = Standard

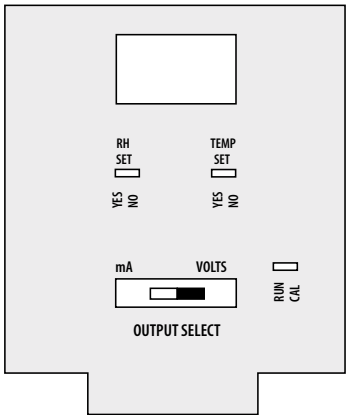
Example:
HWS [1] [N] [R] [S]

CE *Available*

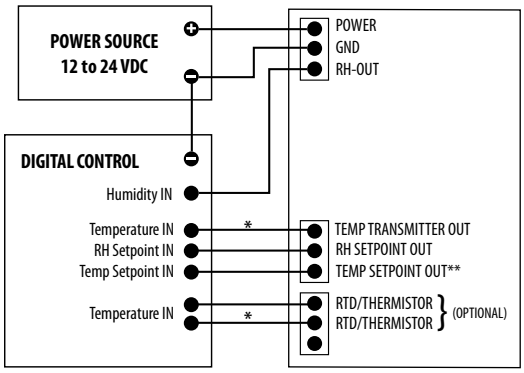
ACCESSORIES

Water guard and other accessories, see page 234

CONFIGURATION

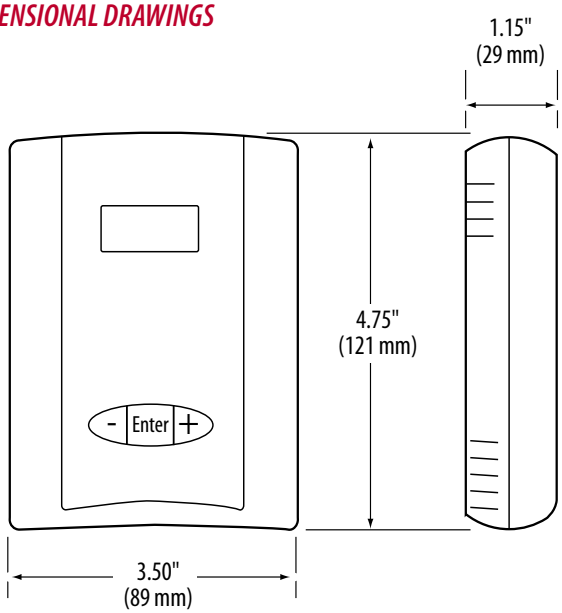


WIRING DIAGRAM



*Temperature output as ordered
**Transmitter models only

DIMENSIONAL DRAWINGS



SPECIFICATIONS

Power Supply		12-30VDC/24VAC, 100mA Max.
Outputs, Alarm		N.O. (Form A), 1A@125VAC/30VDC
Outputs, Analog		Switch-selectable 4-20mA, (clipped and capped)/0-10V/0-5VDC (switch affects both outputs)*
RH Sensor		Digitally profiled thin-film capacitive
RH Accuracy		±1% or ±2% RH, NIST traceable; 0° to 60°C (32° to 140°F)
RH Temperature Coefficient		±0.15% RH/°C (typical)
Temperature Accuracy		±0.15°C (±0.9°F)
Scaling	Humidity	RH: 0 to 100% RH
	Temperature transmitter	10° to 35°C (50° to 95°F)
Calibration Offset		RH: Adjustable ±10% in 0.1% increments; T: Adjustable ±10° in 0.1° increments*
Setpoint Range		RH: 10 to 90% RH in 1% increments; T: Minimum to Full Scale in 1°F increments*
Hysteresis (Deadband)		T: 1° to 10°F in 1°F increments; RH: ±1% to 10% IN 1% increments*
Physical		UL 94-V-0 fire retardant ABS

*HT MODELS

