



ROOM HUMIDITY TRANSMITTER HRC Series

The HRC Series room humidity transmitter uses a highly accurate and field-proven RH sensor in an attractive, low profile enclosure to monitor room relative humidity levels. Additional options include an occupancy override button, a communication jack, a fan speed switch, a slide-pot setpoint control, a resistive temperature sensor and a status LED or a LCD display. The RH output can be field selected as a linear 4-20 mA, 0-5 or 0-10 Vdc signal.

SPECIFICATION:

Sensor.....	Thermoset polymer based capacitive
Accuracy.....	±2, 3 or 5% RH from 5 to 95% RH
Range.....	0 to 100% RH non-condensing
Hysteresis	± 3% RH
Response Time.....	15 seconds typical
Stability	±1.2% RH typical @ 50% RH in 5 years
Power Supply	24 Vac/dc ±10% (non-isolated half-wave rectified)
Consumption @ 24 Vdc	20 mA
Input Voltage Effect	Negligible over specified operating range
Output Signal.....	4-20 mA current loop, 0-5 Vdc or 0-10 Vdc - Jumper selectable
Output Drive @24 Vdc	550 ohm max. for current, 10K ohms min. for voltage
Output Resolution	10 bit PWM
Internal Adjustments	ZERO and SPAN pots
Protection Circuitry.....	Reverse voltage protected and output limited
Operating Conditions	0° to 50°C (32°-122°F), 0-95% RH non-condensing
Enclosure Size	84mmW x 119mmH x 29mmD (3.3" x 4.7" x 1.15")
Wiring Connections.....	Screw terminal block (14 to 22 AWG)

OPTIONS:

LCD DISPLAY

Range.....	00.0 to 99.9 %RH, 3 digit
Display Size.....	38.1 x 16.5 mm (1.5" x 0.65")
Digit Height.....	11.43 mm (0.45")
Symbol	% RH

TEMPERATURE

Sensor.....	Various Thermistors and RTD's
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SETPOINT SLIDE POT

Range.....	Front panel pot, two wire resistive output, 0-10 KΩ
Custom spans available ...	1K, 2K, 5K, 10K or 20K Ω

OVERRIDE

Type.....	Front panel, momentary push-button, 2 wire dry contact
Switch ratings	N.O., SPST, 50 mA @12 Vdc

LED INPUT

Signal Type.....	Digital input, 5 Vdc, 2 wire
Color.....	Yellow, Red or Green

NETWORK COMMUNICATIONS

Type.....	4-pin header connector to
	4-pin terminal block

FAN SPEED SWITCH

Type.....	Side panel mount, 5 position switch
Range.....	Off, Auto, Low, Medium, High
Signal	Resistance: 0, 2, 4, 6, 8 KΩ (Custom ranges available)



PART NUMBER SELECTED

PRODUCT SELECTION INFORMATION:

MODEL	Product Description
HRC	Room Humidity Transmitter

CODE	RH Accuracy
2	2 %
3	3 %
5	5 %

CODE	Display
N	No LCD
L	LCD

CODE	Optional Temperature Sensor
T2	100 Ω Platinum, IEC 751, 385 Alpha, thin film
T5	1801 Ω, NTC Thermistor, ±0.2 C
T6	3000 Ω, NTC Thermistor, ±0.2 C
T7	10,000 Ω, type 3, NTC Thermistor, ±0.2 C
T8	2.252K Ω, NTC Thermistor, ±0.2 C
T12	1000 Ω Platinum, IEC 751, 385 Alpha, thin film
T13	1000 Ω Nickel, Class B, DIN 43760
T14	10KΩ, type 3, NTC Therm, ±0.2 C c/w 11K shunt resistor
T20	20,000 Ω, NTC Thermistor, ±0.2 C
T24	10,000 Ω, type 2, NTC Thermistor, ±0.2 C

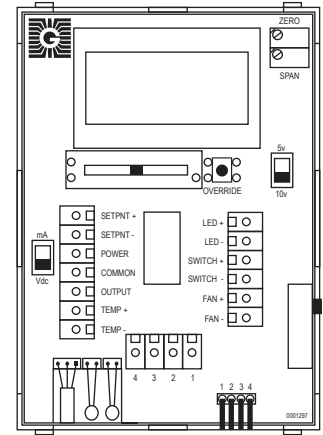
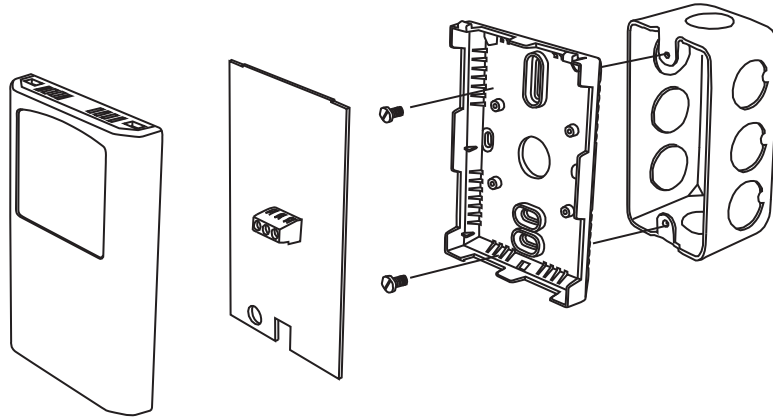
CODE	Options (Multiple selections may be made)
P	Setpoint Adjustment
S	Override switch
Y	Yellow LED (n/a with LCD)
R	Red LED (n/a with LCD)
G	Green LED (n/a with LCD)
E	Comm. Jack (4 pin header)
F	Fan speed switch

TYPICAL INSTALLATION:

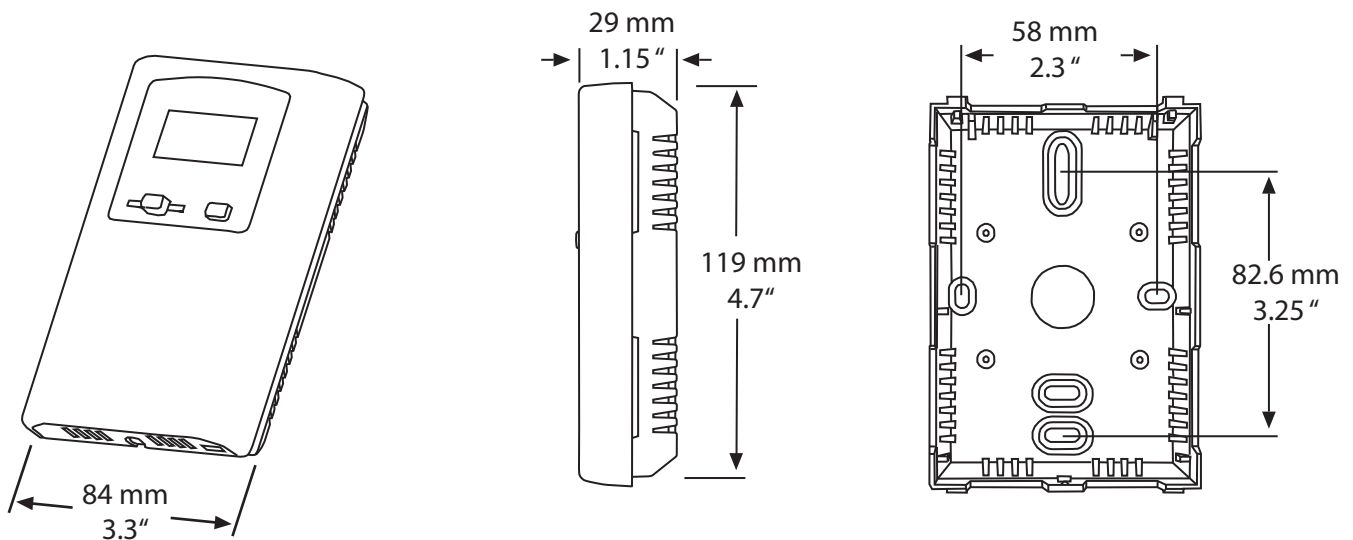
For complete installation and wiring details, please refer to the product installation instructions.

The HRC series can be mounted directly to a single gang electrical box or directly to a wall. Multiple mounting holes are provided for connection to a variety of electrical boxes.

A terminal block connection is provided. connection to the Building Automation System.



DIMENSIONS:



Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.



GREYSTONE

ENERGY SYSTEMS INC

Greystone Energy Systems, Inc.

150 English Drive, Moncton,

New Brunswick, Canada E1E 4G7

(506) 853-3057 Fax: (506) 853-6014

North America: 1-800-561-5611

e-mail: mail@greystoneenergy.com

www.greystoneenergy.com

RoHS
COMPLIANT



Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC sensors and transmitters for Building Automation Management Systems.

We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability.

GREYSTONE HAS AN **ISO 9001** REGISTERED QUALITY SYSTEM