GREYSTONE
ENERGY SYSTEMS INC

ROOM HUMIDITY TRANSMITTER HRC Series

The HRC Series room humidty 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

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 postion 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

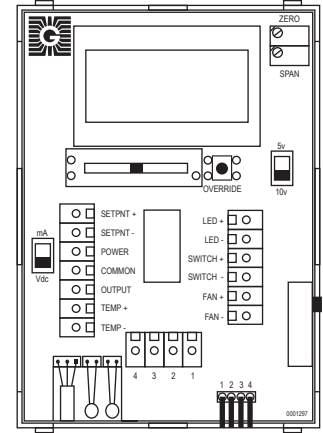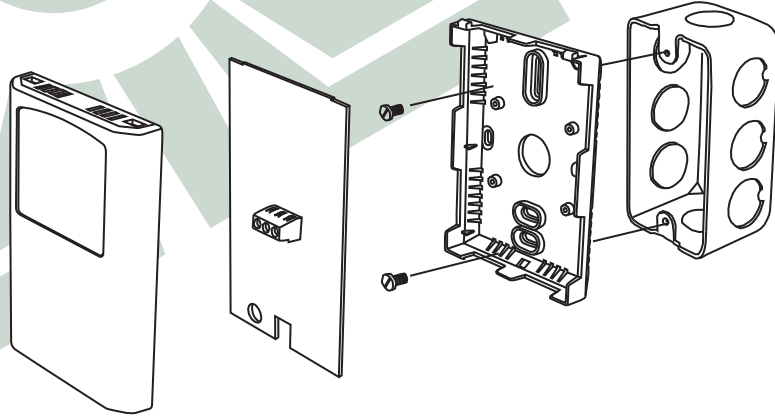| CODE	Optional Temperature Sensor
T2	100 Ω Platinum, IEC 751, 385 Alpha, thin film
T5	1801 Ω, NTC Thermistor, ±0.2 C
T6	3000 Ω, NTC Thermistor, ±0.2 C
T7	10,000 Ω, type 3, NTC Thermistor, ±0.2 C
T8	2.252K Ω, NTC Thermistor, ±0.2 C
T12	1000 Ω Platinum, IEC 751, 385 Alpha, thin film
T13	1000 Ω Nickel, 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

GREYSTONE ENERGY SYSTEMS, INC.

RoHS COMPLIANT

MADE IN CANADA · ISO9001 · CE
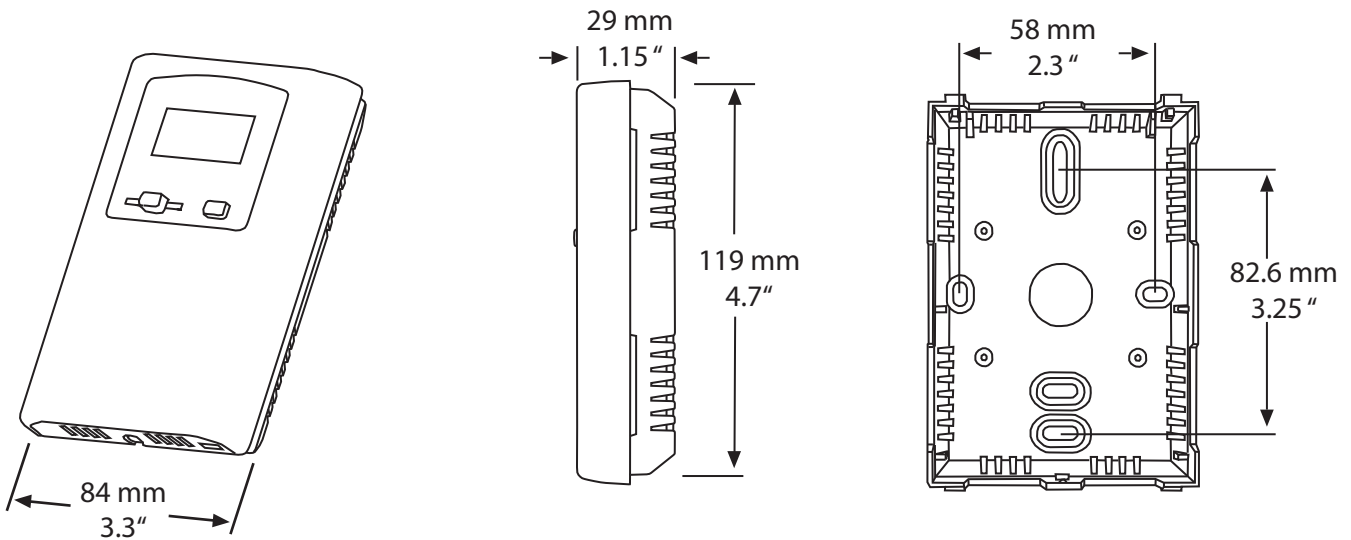
TYPICAL INSTALLATION:

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:

29 mm
1.15 "

58 mm
2.3 "

119 mm
4.7"

82.6 mm
3.25 "

84 mm
3.3"

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

GREYSTONE
ENERGY SYSTEMS INC

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RoHS
COMPLIANT

CE

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

V.07/13

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