GREYSTONE
ENERGY SYSTEMS INC

SPACE HUMIDITY/
TEMPERATURE
TRANSMITTER
HTRC Series

The HTRC series uses a highly accurate and reliable thermoset polymer based capacitance humidity sensor and curve matched thermistor together with state-of-the-art digital linearization and temperature compensated circuitry in an attractive, low profile enclosure to monitor room humidity & temperature levels. Options include manual override, communication jack & fan speed switch

SPECIFICATIONS:

Power Supply..............................24Vac/dc ±10% (non-isolated half-wave rectified)
Consumption..............................60 mA max @ 24 Vdc
Input Voltage Effect ....Negligible over specified operating range
Protection Circuitry ....Reverse voltage and MOV protected and output limited
Output Signals ....4-20 mA active (sourcing) or 0-5 Vdc or 0-10 Vdc (specify when ordering)
Output Resolution......................10 bit for all signals
Output Drive Capability ....550 ohm max for current 10Kohm min for voltage
Programming and Selection....Via push buttons and on-screen menu
Operating Conditions..............0°-50°C (32°-122°F) 0-95%RH non-condensing
Wiring Connections ....Screw terminal block (14 to 22 AWG)
Enclosure Size ....84mmW x 117mmH x 29mmD (3.3" x 4.6" x 1.15")

LCD DISPLAY

Display Size.................................38.1 x 16.5 mm (1.5" x 0.65")
Digit Height................................11.43 mm (0.45")
Symbols.......................................°C, °F, %RH, OCC
Backlight.....................................Enable or disable via menu

TEMPERATURE

Accuracy......................................± 0.2°C (±0.4°F)
Range ....0° to 35°C (32° to 95°F) or 0° to 50°C (32° to 122°F) programmable
Offset..±9° F programmable
Display Units ....°C or °F programmable
Display Resolution ....0.5° <100°, 1° >100°

RH

Sensor...Thermoset polymer based capacitive
Accuracy......................................±2, 3, or 5% RH
Range..0-100% RH
Temperature Compensation..0° to 50°C (32° to 122°F)
Hysteresis... ....± 3% RH
Response Time...........................15 seconds typical
Stability.......................................±1.2% RH typical @ 50% RH in 5 years
Offset..±20% RH programmable

OVERRIDE

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

OCCUPIED INPUT

Signal Type ....Digital input, 0/5 Vdc or dry contact to common
Logic ....Active low or active high, programmable
Action ....Causes "OCC" segment to light on LCD

PART NUMBER SELECTED

PRODUCT SELECTION INFORMATION:

MODEL	Product Description
HTRC	Room Humidity/Temperature Transmitter

CODE	Accuracy
2	2%
3	3%
5	5%

CODE	LCD Display
N	Concealed
L	Viewable

CODE	Output
I	4-20 mA output
V	0-5 Vdc or 0-10 Vdc output - Jumper selectable

CODE	Options
S	Override switch (Includes OCC input)
J	Communication Jack (3.5 mm phono)
F	Fan speed switch

HTRC	2	L	V	-

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

FAN SPEED SWITCH
Range ....Off, Auto, Low, Medium, High
Signal ....Resistance: 0, 2, 4, 6, 8 KΩ (Custom ranges available)

NETWORK COMMUNICATIONS
3.5mm phono jack....................Ring/Mid/Tip connections to a 3-pin terminal block

GREYSTONE ENERGY SYSTEMS, INC.

RoHS COMPLIANT

CE

TYPICAL INSTALLATION:

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

The HTRC series can be mounted directly to a single gang electrical box or directly to a wall. Insulating foam is adhered to the back of the enclosure to provide a thermal barrier from wall temperatures.

A terminal block connection is provided for connection to the Building Automation System.
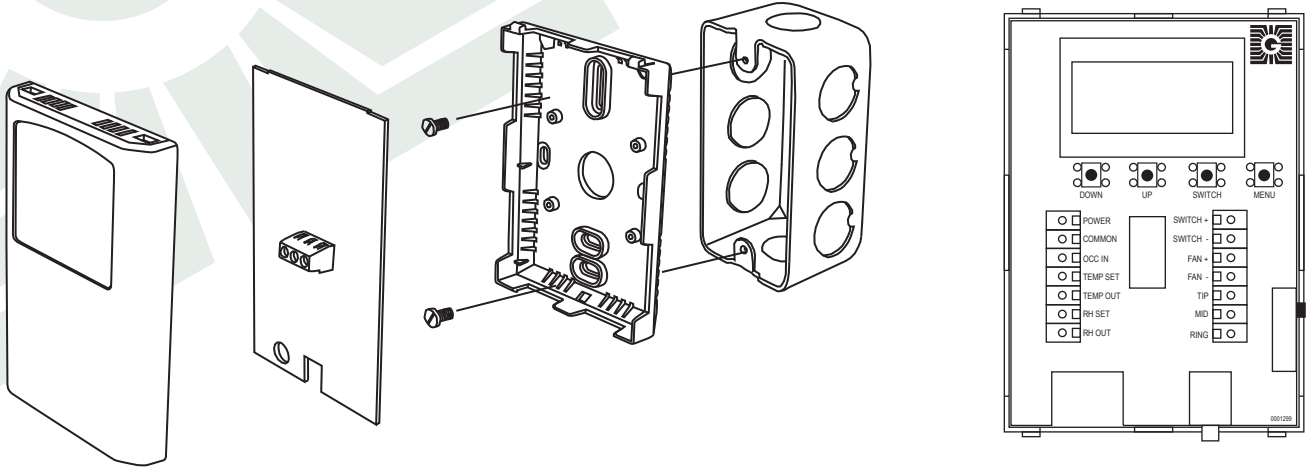
DIMENSIONS
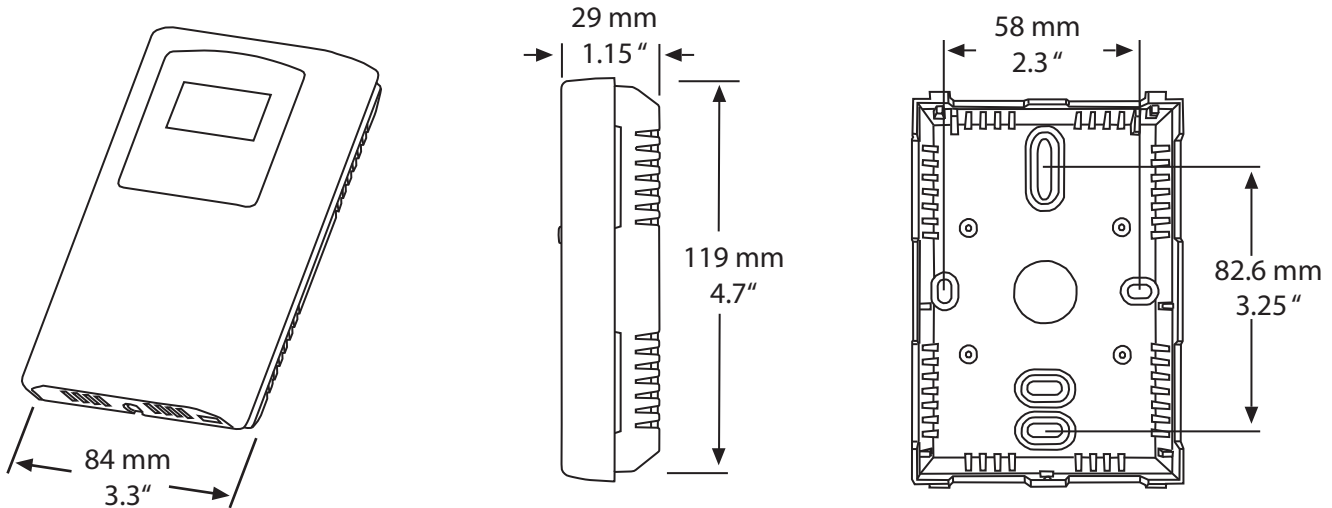
84 mm
3.3"

29 mm
1.15"

119 mm
4.7"

58 mm
2.3"

82.6 mm
3.25"

RoHS
COMPLIANT

Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC sensors and transducers 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