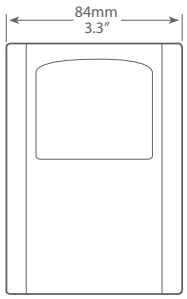
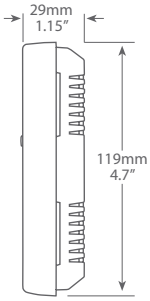
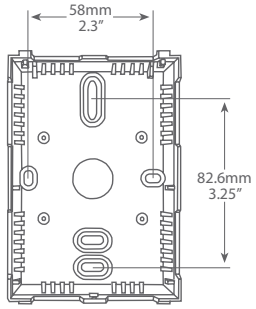
GREYSTONE
ENERGY SYSTEMS INC

ROOM HUMIDITY / TEMPERATURE TRANSMITTER







HTRC SERIES

PRODUCT DESCRIPTION

The HTRC Humidity/Temperature transmitter incorporates two sensors in one attractive wall mount enclosure for the most efficient environmental monitoring and control system. It uses a field-proven RH sensor to monitor relative humidity and a curve-matched thermistor to measure temperature and provides two analog outputs of either 4-20 mA, or 0-5 Vdc / 0-10 Vdc.

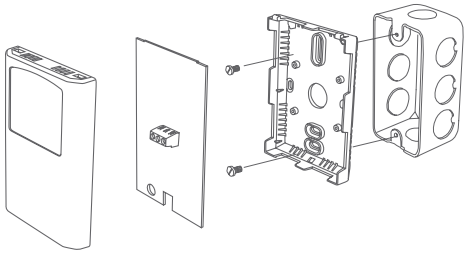
Additional options include an occupancy override button, or LCD display.

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.



SPECIFICATIONS

TEMPERATURE	**Sensor:** Curve-matched thermistor **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:** ±5.0°C programmable **Display Units:** °C or °F programmable **Display Resolution:** 0.1° < 100°, 1° > 100°
HUMIDITY	**Sensor:** Thermoset polymer based capacitive **Accuracy:** ±2, 3, or 5 %RH from 5 to 95 %RH **Range:** 0 to 100 %RH **Hysteresis:** ±0.8 %RH @ 25°C (77°F) **Response Time:** 8 seconds **Offset:** ±20 %RH, programmable **Stability:** <0.25 %RH/year
POWER SUPPLY	24 Vac/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 protected and output limited
OUTPUT SIGNAL	4-20 mA active (sourcing), 0-5 Vdc or 0-10 Vdc (specify when ordering)
OUTPUT RESOLUTION	10 bit for all signals
OUTPUT DRIVE @ 24 VDC	**Current:** 550 Ω maximum **Voltage:** 10K Ω minimum
PROGRAMMING/SELECTION	Via internal push buttons and on-screen menu
OPERATING CONDITIONS	0 to 50°C (32 to 122°F), 0 to 95 %RH non-condensing
WIRING CONNECTIONS	Screw terminal block (14 to 22 AWG)
ENCLOSURE	White ABS - IP30 (NEMA 1) 84mm W x 119mm H x 29mm D (3.3" x 4.7" x 1.15")
OPTIONAL LCD DISPLAY	**Range:** 00.0 to 99.9, 3 digit **Symbols:** °C, °F %RH, OCC **Display Size:** 38.1mm x 16.5mm (1.5" x 0.65") **Digit Height:** 11.43mm (0.45") **Backlight:** Enable/disable via menu
OPTIONAL OVERRIDE	**Type:** Front panel, momentary push button, 2 wire dry contact **Switch Ratings:** N.O., SPST, 50 mA @ 12 Vdc
OPTIONAL OCCUPIED INPUT (INCLUDED WITH OVERRIDE OPTION)	**Type:** Digital input, 0-5 Vdc or dry contact to common **Logic:** Active low or active high, programmable **Action:** Causes "OCC" segment to light in display
COUNTRY OF ORIGIN	Canada

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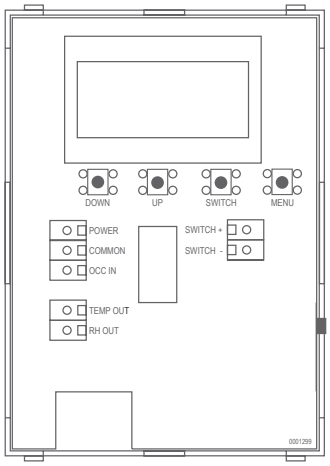
WIRING INFORMATION



TERMINAL	FUNCTION
PWR	+24 Vdc/ac
COM	Common
OCC IN	Digital Input
TEMP OUT	Analog Output
RH OUT	Analog Output
SWITCH +	Digital Output
SWITCH -	Digital Output

ORDERING

PRODUCT	**HTRC**	Room Humidity/Temperature Transmitter
RH ACCURACY	**2**	2%
	3	3%
	5	5%
LCD DISPLAY	**N**	Concealed
	L	Viewable
OUTPUT	**I**	4-20 mA
	V	0-5 Vdc or 0-10 Vdc (menu selectable)
OPTIONS	**S**	Override switch (includes occupied input)

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

PART NUMBER

HTRC

RoHS COMPLIANT

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