GREYSTONE
ENERGY SYSTEMS INC

The HAHTRC series uses 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	± 0.1˚C (±0.18˚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	±1% (30 to 70% RH) ±2% (5 to 95%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
HAHTRC	High Accuracy Room Humidity/Temperature Transmitter

CODE	Accuracy
1	1%
2	2%

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

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
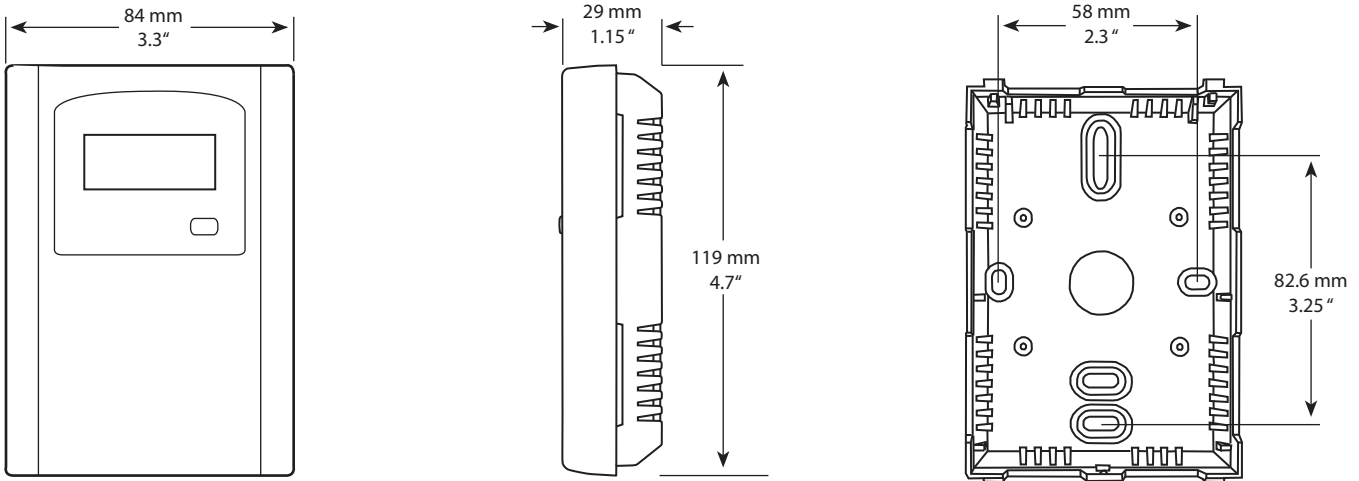
TYPICAL INSTALLATION:

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

The HAHTRC 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.

DOWN   UP   SWITCH   MENU

POWER	SWITCH +
COMMON	SWITCH -
OCC IN	FAN +
TEMP SET	FAN -
TEMP OUT	TIP
RH SET	MID
RH OUT	RING

0001299

DIMENSIONS

84 mm
3.3"

29 mm
1.15"

119 mm
4.7"

58 mm
2.3"

82.6 mm
3.25"
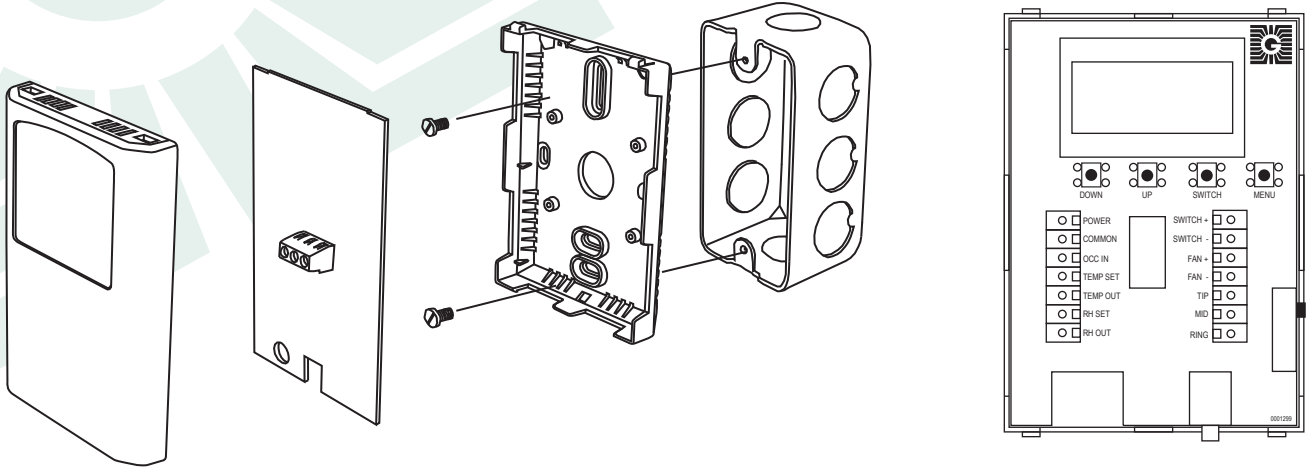
GREYSTONE
ENERGY SYSTEMS INC

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RoHS COMPLIANT

GREYSTONE 5 Warranty

MADE IN CANADA

Certified System ISO9001

CE

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