



# GREYSTONE ENERGY SYSTEMS INC

The HATXRC series high accuracy room temperature transmitter is an attractive, low profile enclosure that incorporates a precision platinum RTD and a transmitter that provides a high accuracy signal with excellent long term stability, low hysteresis and fast response for measurement of room temperatures. Additional options are available which include setpoint adjustment, manual override & Fan speed control.

## SPECIFICATION:

Sensor..... 1000 ohm or 100 ohm Platinum RTD  
 Sensor Accuracy..... **Class A:**  $\pm 0.15^{\circ}\text{C}$  @  $0^{\circ}\text{C}$   
                                   **1/3 DIN:**  $\pm 0.1^{\circ}\text{C}$  @  $0^{\circ}\text{C}$   
                                   **1/10 DIN:**  $\pm 0.03^{\circ}\text{C}$  @  $0^{\circ}\text{C}$   
 Output Signal..... 4-20mA current loop, 0-5 vdc, or 0-10 Vdc (factory configured)  
 Transmitter Accuracy.....  $\pm 0.25\%$  of span, including linearity  
 4-20 mA loop Power Supply.... 15-35 Vdc or 22-32 Vac  
 Minimum Current Loop ..... 2 mA nominal (occurs with shorted sensor)  
 Maximum Loop Current..... 22.5 mA nominal (occurs with open sensor)  
 Maximum Loop Load ..... >600 ohms  
 0-5 Vdc Power Supply..... 10-35 Vdc or 10-32 Vac  
 0-10 Vdc Power Supply..... 15-35 Vdc or 15-32 Vac  
 Maximum Current (Voltage) ... 5 mA nominal  
 Maximum Output (Voltage) ... Limited to <5.5 Vdc for 0-5 Vdc, <10.5 for 0-10 vdc  
 Input Voltage Effect..... Negligible over specified operating range  
 RFI Rejection ..... Good RFI rejection of normal frequencies  
 Protection Circuitry..... Reverse voltage protected and output limited  
 Operating Conditions ..... 0 -  $50^{\circ}\text{C}$  (32 -  $122^{\circ}\text{F}$ ), 0-95% RH non-condensing  
 Enclosure ..... White ABS - IP30 (NEMA 1) 84mmW x 117mmH x 29mmD (3.3" x 4.6" x 1.15")  
 Wiring Connections..... Screw terminal block (14 to 22 AWG)

## OPTIONS:

### Setpoint Adjustment

Type..... Front panel slidepot, 2 wire resistance output  
 Range..... 0K to 10K  $\Omega$  standard  
 Custom spans available ..... 1K, 2K, 5K, 10K or 20K  $\Omega$

### Manual Override

Type..... Front panel, momentary pushbutton  
 Front panel pushbutton..... 50 mA @12 Vdc, N.O., SPST

### Status LED Input

Signal Type..... Active high, low or 2-wire, 5 V current limited standard  
 LED Colors..... Yellow (Y), Red (R) or Green (G)  
 Power Supply..... 5 Vdc standard, 10 or 24 Vdc optional

### Communication Jacks

Molex ..... 4 Pin header to 4 pin terminal block. Requires HHTA - Hand Held Adapter

### Fan Speed Switch

Type..... Side mounted, 5 position slide switch  
 Designators ..... Off, Auto, Low, Medium, High  
 Signal ..... 2 wire, resistance output 0, 2, 4, 6, 8 K $\Omega$   
 Custom ranges available

# HIGH ACCURACY ROOM TEMPERATURE TRANSMITTER HATXRC Series



## PART NUMBER SELECTED

## PRODUCT SELECTION INFORMATION:

MODEL	Product Description
HATXRC	High Accuracy Room Temperature Transmitter

CODE	Sensor
18	1000 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film, Class A
48	1000 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film, 1/3 DIN
22	1000 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film, 1/10 DIN
38	100 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film, Class A
53	100 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film, 1/3 DIN
37	100 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film, 1/10 DIN

CODE	Output
A	4-20 mA
D	0-5 Vdc
E	0-10 Vdc

CODE	Range
1	0-35 $^{\circ}\text{C}$ (32 - 95 $^{\circ}\text{F}$ )
2	0-50 $^{\circ}\text{C}$ (32 - 122 $^{\circ}\text{F}$ )

CODE	Options
P	0-10K linear slide pot for setpoint
P1	20-30K linear slide pot for setpoint
S	Exposed push button switch (NO)
Y	Yellow LED
R	Red LED
G	Green LED
E	External jack (4-pin header)
F	Fan speed switch

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

Due to the many possible configurations, special part numbers may be required. Please contact Greystone for more information

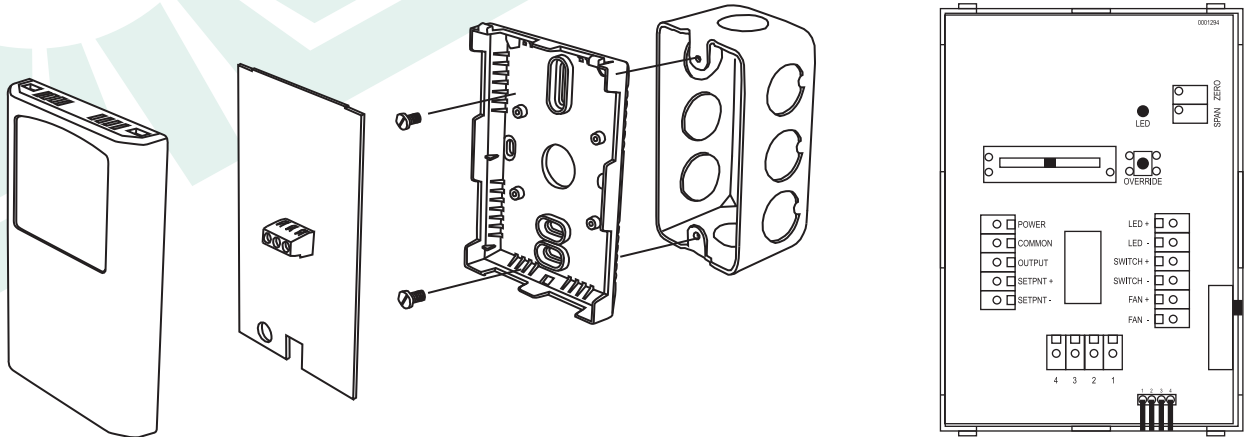
**HATXRC\*\*\* Description:**

## TYPICAL INSTALLATION:

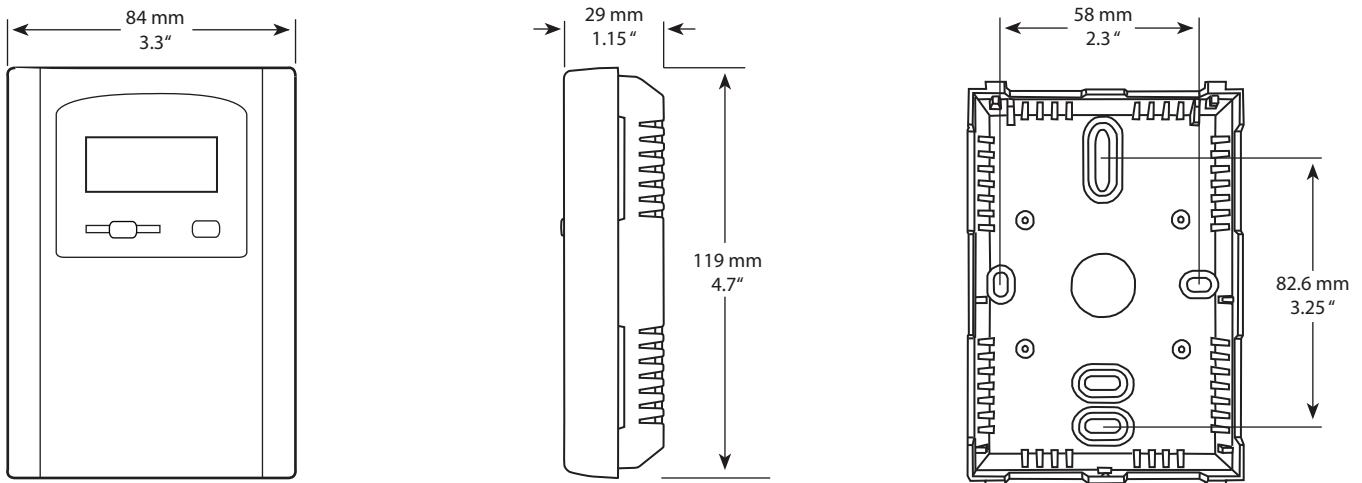
For complete installation and wiring details, please refer to the product installation instructions.

The HATXRC 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 internal wall temperatures.

A terminal block connection is provided for 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