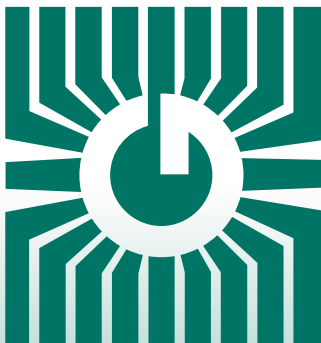


GREYSTONE

ENERGY SYSTEMS INC



ROOM TEMPERATURE TRANSMITTERS TXRC Series



Precision temperature control/sensing

FEATURES:

- Precision RTD sensing element
- Choice of scaled ranges and outputs
- Various options: Setpoint Adjustment, Override, etc.
- Custom laser etching available

*Peace of mind
through reliable
temperature monitoring*

GREYSTONE HAS AN ISO 9001 REGISTERED QUALITY SYSTEM

DESCRIPTION:

The TXRC Series room temperature transmitter is a precision current loop transmitter. It utilizes the platinum RTD and is available in various configurations. The transmitter provides a high accuracy signal with excellent long term stability, low hysteresis and fast response while being virtually immune to power supply noise and input voltage fluctuations. All models operate on a wide range of AC or DC power supplies.

The TXRC is supplied in an attractive wall mount enclosure. The universal back plate can be mounted directly to several electrical box styles or directly on any wall.

The TXRC has various options available such as setpoint adjustment, manual override, etc. that allows for use in a multitude of applications.

SPECIFICATIONS:

Sensor.....	1000 ohm or 100 ohm Platinum RTD
Sensor Accuracy.....	$\pm 0.3^{\circ}\text{C}$ ($\pm 0.54^{\circ}\text{F}$) @ 0°C (32°F)
Output Signal.....	4-20mA current loop, 0-5 vdc, or 0-10 Vdc (factory configured)
Transmitter Accuracy.....	$\pm 0.1\%$ 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°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 Ω standard
Custom spans available.....	1K, 2K, 5K, 10K or 20K Ω

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
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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 Ω Custom ranges available, contact Greystone

TXRC - ROOM TEMPERATURE TRANSMITTER:

PRODUCT ORDERING INFORMATION:

MODEL	Product Description
TXRC	Room Temperature Transmitter

CODE	Sensor
2	100 Ω Platinum, IEC 751, 385 Alpha, thin film
12	1000 Ω Platinum, IEC 751, 385 Alpha, thin film (Standard)

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

CODE	Scaled Transmitter Range
1	0°C - 35°C (32°F - 95°F)
2	0°C - 50°C (32°F - 122°F)

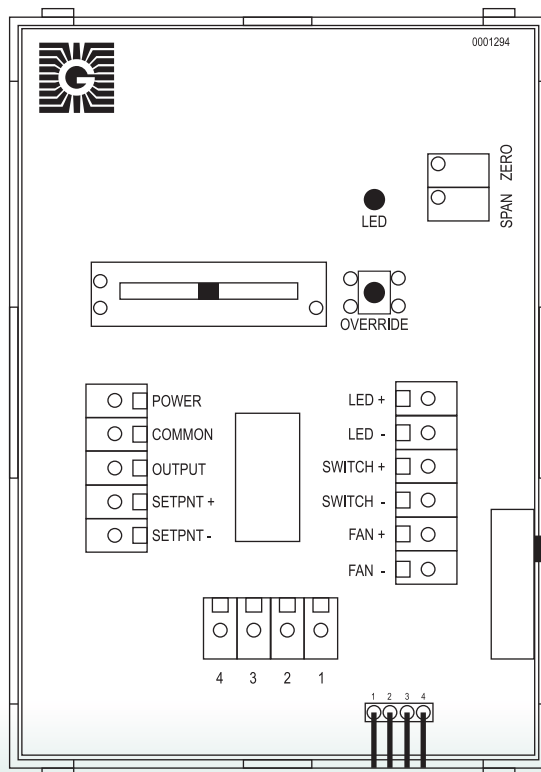
CODE	Options (Multiple selections can be made)
P	0-10K linear slide pot for set point control (Other ranges available, contact Greystone)
S	Front panel push button momentary switch (NO)
Y	Yellow LED
R	Red LED
G	Green LED
E	External jack for remote system access (4-pin header)
F	Fan Speed Switch, 5 position, (Off, Auto, Low, Mid, High)

TXRC	12	A	2	P	S
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Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

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

PCB/WIRING INFORMATION



Terminal

- POWER
- COMMON
- OUTPUT
- SETPNT +
- SETPNT -
- LED +
- LED -
- SWITCH +
- SWITCH -
- FAN +
- FAN -
- 1
- 2
- 3
- 4

Function

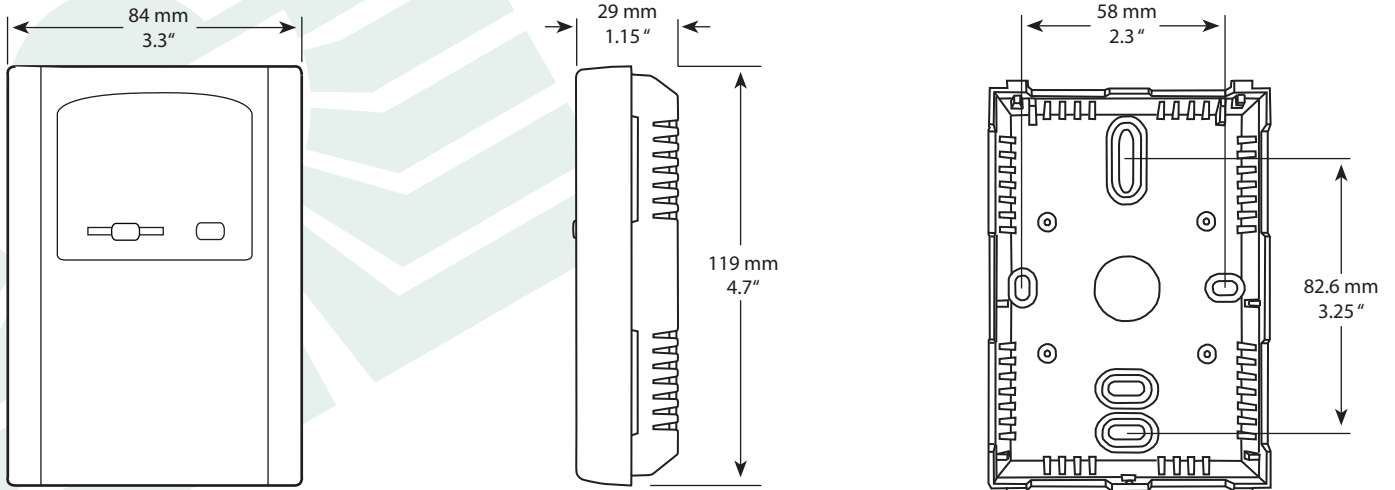
- Power input
- GND or COMMON
- Analog Output 4-20 mA, 0-5 or 0-10 Vdc
- Resistance Output
- GND or COMMON
- Vdc input (5 Vdc standard)
- GND or COMMON
- Digital output
- GND or COMMON
- Resistance output
- GND or COMMON
- To External Jack PIN 1
- To External Jack PIN 2
- To External Jack PIN 3
- To External Jack PIN 4

* Some models do not have all these features

**To save on number of connection wires, all GND or COMMON may be connected together.

***Illustration shows standard wiring configuration. Custom configurations are available. Please contact Greystone.

DIMENSIONS:



ACCESSORIES:



HHTA-XXX

The HHTA - Handheld Adapter converts the Greystone standard 4 pin connector to the connector of choice such as a RJ12, phone jack. Several styles and configurations are available. Please contact Greystone.



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Greystone Energy Systems, Inc.

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.

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