GREYSTONE
ENERGY SYSTEMS INC

ROOM TEMPERATURE TRANSMITTER

84mm
3.3"

29mm
1.15"

58mm
2.3"

119mm
4.7"

82.6mm
3.25"

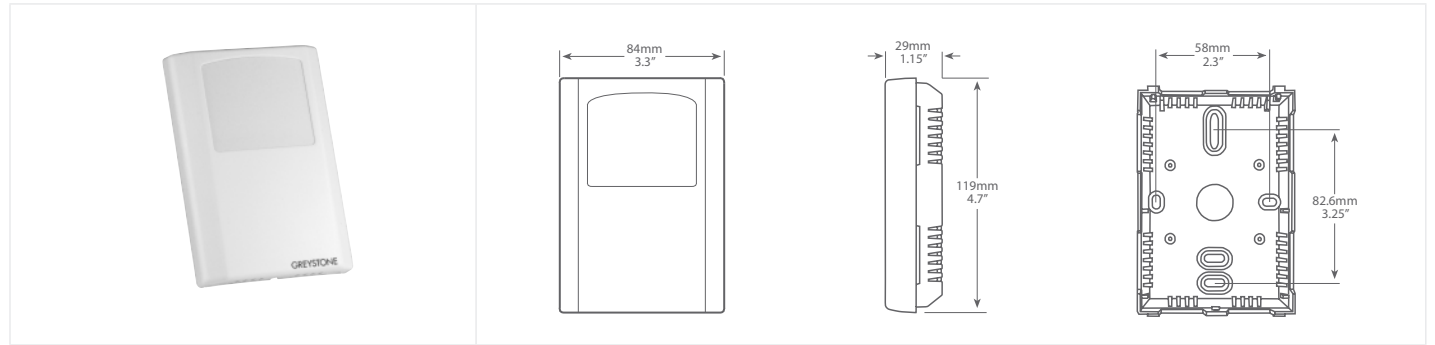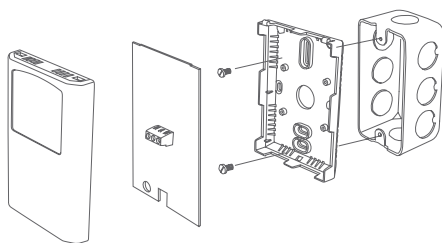### TXRC SERIES

PRODUCT DESCRIPTION

The TXRC series 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.

TYPICAL INSTALLATION

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

The TXRC 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.
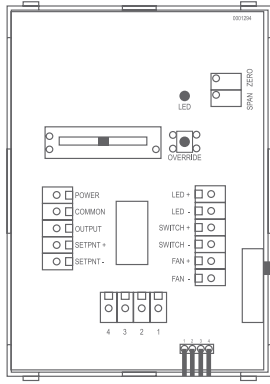

SPECIFICATIONS

SENSING ELEMENT	1000 Ω Platinum RTD
SENSOR ACCURACY	±0.3°C (±0.54°F) @ 0°C (32°F)
OUTPUT SIGNAL	4-20 mA, 0-5 Vdc, or 0-10 Vdc (factory configured)
TRANSMITTER ACCURACY	±0.1% of span, including linearity
4-20 mA LOOP POWER SUPPLY	15-35 Vdc or 22-32 Vac
MINIMUM LOOP CURRENT	2 mA nominal (occurs with shorted sensor)
MAXIMUM LOOP CURRENT	22.5 mA nominal (occurs with open sensor)
MAXIMUM LOOP LOAD	>600 Ω
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)	2 mA nominal
MAXIMUM OUTPUT (VOLTAGE)	Limited to <5.5 Vdc for 0-5 Vdc, <10.5 for 0-10 Vdc
INPUT VOLTAGE EFFECT	Negligble over specified operating range
RFI REJECTION	Good RFI rejection of normal frequencies
PROTECTION CIRCUITRY	Reverse voltage protedted and output limited
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 JACK	4 pin header to 4 pin terminal block. Requires HHTA - Hand Held Adapter
FAN SPEED SWITCH	**Type:** Side mounted, 5 position slide switch **Designers:** Off, Auto, Low, Medium, High **Signal:** 2 wire, resistance output 0, 2, 4, 6, 8 KΩ (custom ranges available)
SET-POINT SLIDE POT	**Type:** Front panel slide-pot, 2 wire resistance output **Range:** 0K to 10KΩ standard **Custom Spans Available:** 1K, 2K, 5K, 10K, or 20 KΩ
OPERATING CONDITIONS	0 to 50°C (32 to 122°F), 5 to 95 %RH non-condensing
ENCLOSURE	White ABS, IP30 (NEMA 1) 84mm W x 119mm H x 29mm D (3.3" x 4.7" x 1.15")
WIRING CONNECTIONS	Terminal block (14 to 22 AWG)
COUNTRY OF ORIGIN	Canada

WIRING INFORMATION

TERMINAL	FUNCTION
PWR	Power Input
OUT	Analog Output
COM	Common
LED +	+5 Vdc
LED-	Common
SWITCH +	Digital Output
SWITCH -	Common
FAN +	Resistance Output
FAN -	Common
SETPNT +	Resistance Output
SETPNT -	Common

ORDERING

PRODUCT	TXRC	Room Temperature Transmitter
SENSOR	12	1000 Ω Platinum, IEC 751, 385 Alpha, thin film (standard)
OUTPUT	A D E	4-20 mA 0-5 Vdc 0-10 Vdc
RANGE	1 2	0 to 35°C (32 to 95°F) 0 to 50°C (32 to 122°F)
OPTIONS	P P1 S Y R G E F	0-10K linear slide pot for setpoint 20-30K linear slide pot for setpoint Exposed push button switch (N.O.) Yellow LED Red LED Green LED External jack (4 pin header) Fan speed switch

PART NUMBER

TXRC

NOTE: 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.

TXRC*GS*** DESCRIPTION	