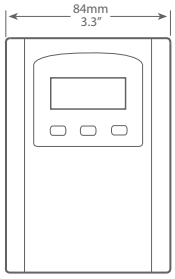
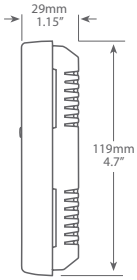
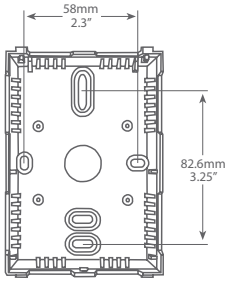
GREYSTONE
ENERGY SYSTEMS INC

ROOM TEMPERATURE SENSOR









TSPC SERIES

PRODUCT DESCRIPTION

The TSPC room temperature sensor with resistive setpoint control is available in an attractive wall mount enclosure and can be configured with various options. It is available with various curve-matched thermistors or RTD sensors to measure temperature.

A back-lit LCD displays room temperature, setpoint on demand and occupancy. Several operating parameters can be programmed using a keypad and on-board jumpers configure the ˚C/°F display or disable the backlight.

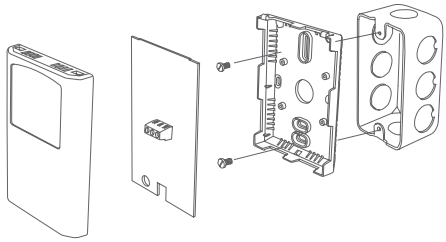
Available options include a dry-contact override switch, and a jack for a network connection.

TYPICAL INSTALLATION

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

The TSPC 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. There are several wiring configurations depending on the options selected.

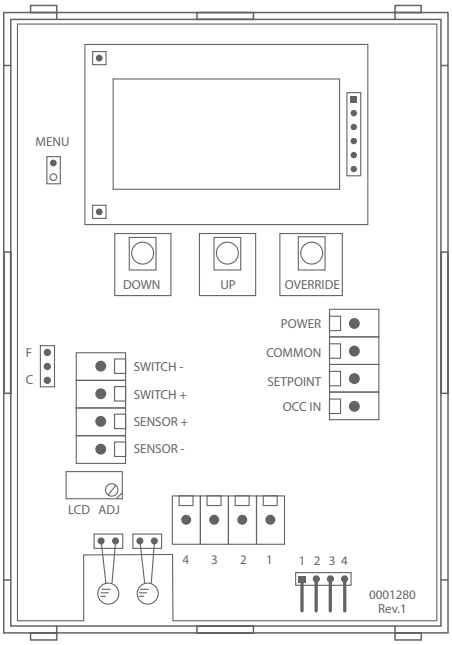


SPECIFICATIONS

TEMPERATURE SENSOR	Thermistor or RTD (see ordering chart)
SENSOR ACCURACY	**Thermistors:** ±0.2°C (±0.36°F) @ 25°C (77°F) **Platinum RTD's:** ±0.3°C (±0.54°F) @ 0°C (32°F) **Nickel RTD's:** ±0.4°C (±0.72°F) @ 0°C (32°F)
SETPOINT ADJUSTMENT	**Range:** Up/Down pushbuttons for ±10 resistive steps **Signal:** Several resistance ranges available **Midpoint:** Programmable, 20 to23°C or 68 to 73°F **LCD Increment:** Setpoint step size is 0.5/1.0°C or 1.0/2.0°F **Action:** Programmable, direct or reverse acting
LCD DISPLAY	**Range:** 0.0 - 35.0°C or 32.0 - 95.0°F selectable via jumper **Display Resolution:** 0.5°C/°F **Display Size:** 38.1mm W x 16.5mm H (1.5" x 0.65") **Digit Height:** 11.43mm (0.45") **Symbols:** °C, °F, OCC **Backlight:** Enable or disable via menu
OPTIONAL OVERRIDE SWITCH (S)	**Momentary Pushbutton:** N.O., SPST, 50 mA @ 12 Vdc
OCCUPIED INPUT	**Signal Type:** Digital input, 0-5 Vdc standard, active low **Action:** Causes "OCC" segment to light on LCD
OPTIONAL COMMUNICATION JACK (E)	**4 PIN:** 4 pin header. Requires HHTA - Hand Held Adapter
POWER SUPPLY	24 Vac / dc ±10%
CONSUMPTION	20 mA max
INPUT VOLTAGE EFFECT	Negligible over specified operating range
RFI REJECTION	Good RFI rejection
PROTECTION CIRCUITRY	Reverse voltage protected
AMBIENT OPERATING RANGE	0 to 60°C (32 to 140°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

GREYSTONE
ENERGY SYSTEMS INC

WIRING INFORMATION



TERMINAL	FUNCTION
SWITCH	Digital Output
SENSOR	Resistance Output
PWR	Supply Voltage
COM	Common
SETPNT	Resistance Output
OCC IN	Digital Input

ORDERING

PRODUCT		
	TSPC	Room Temperature Sensor
SENSOR	**2**	100 Ω Platinum, IEC 751, 385 Alpha, thin film
	5	1801 Ω NTC Thermistor, ±0.2°C
	6	3000 Ω NTC Thermistor, ±0.2°C
	7	10,000 Ω Type 3, NTC Thermistor, ±0.2°C
	8	2.252K Ω NTC Thermistor, ±0.2°C
	12	1000 Ω Platinum, IEC 751, 385 Alpha, thin film
	13	1000 Ω Nickel, Class B, DIN 43760
	14	10,000 Ω Type 3, NTC Thermistor, ±0.2°C c/w 11K shunt resistor
	20	20,000 Ω NTC Thermistor, ±0.2°C
	24	10,000 Ω Type 2, NTC Thermistor, ±0.2°C
	59	10,000 Ω, 25°C, ±1%, B = 3435 ±1% (25/85)
RESISTANCE OUTPUT (RANGE 16-26°C IN 0.5°C INCREMENTS OR 60-80°F IN 1°F INCREMENTS)	**P**	0-10,000 Ω linear
	P1	20,00 - 30,000 Ω
	P2	2000 - 3000 Ω
	P3	0 - 20,000 Ω
	P4	4000 - 2000 Ω
	P5	0 - 2000 Ω
	P6	8000.7 - 3107.3 Ω
OPTIONS (MULTIPLE SELECTIONS CAN BE MADE)	**E**	4 pin molex external jack for communications
	S	Exposed override switch with LCD indication option (OCC)

PART NUMBER

TSPC

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

RoHS COMPLIANT

Greystone Energy Systems, Inc.
150 English Drive, Moncton,
New Brunswick, Canada E1E 4G7

Ph: +1 (506) 853-3057 Fax: +1 (506) 853-6014
North America: 1-800-561-5611
E-mail: mail@greystoneenergy.com

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