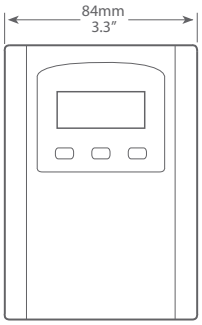
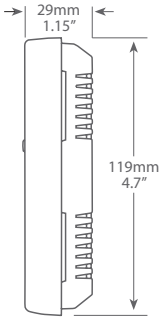
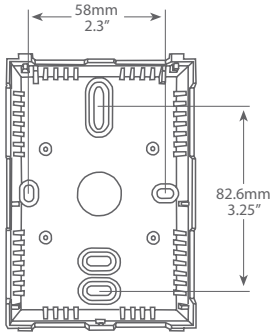
GREYSTONE
ENERGY SYSTEMS INC

HUMIDITY / TEMPERATURE TRANSMITTER C/W SETPOINT ADJUSTMENTS







SPC SERIES

PRODUCT DESCRIPTION

The SPC Temperature/Humidity transmitter incorporates two sensors in one attractive wall mount enclosure for the most efficient environmental monitoring and control system. It uses a field-proven RH senor to monitor relative humidity and a curve-matched thermistor to measure temperature.

Two setpoint controls are also available for temperature and humidity adjustment. The device may also include an occupancy override button. Both measurements and setpoint signals are available on separate outputs as linear 4-20 mA, 0-5 or 0-10 Vdc signals.

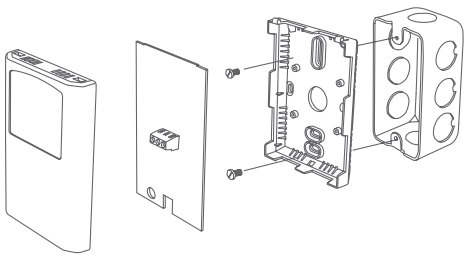
Several configurations of the device are available with one to four outputs as required. An LCD is included for configuration and local indication of all parameters. Several operating parameters can be programmed using a keypad for specific applications including four temperature ranges and °C / °F display.

TYPICAL INSTALLATION

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

The SPC series can be mounted directly to a single gang electrical box or directly to a wall. Insulation 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.



SPECIFICATIONS

POWER SUPPLY	24 Vac/dc ±10 % (non-isolated half-wave rectified)
CONSUMPTION	20 mA + (20 mA x number of outputs) max @ 24 Vdc
INPUT VOLTAGE EFFECT	Negligible over specified operating range
PROTECTION CIRCUITRY	Reverse voltage 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	**Current:** 550 Ω max **Voltage:** 10,000 Ω min
PROGRAMMING AND SELECTION	Via internal pushbuttons and on-screen menu
AMBIENT OPERATING RANGE	0 to 50°C (32 to 122°F) 0-95 %RH non-condensing
WIRING CONDITIONS	Screw terminal block (14 to 22 AWG)
ENCLOSURE	**Ratings:** White ABS - IP30 (NEMA 1) **Dimensions:** 84mm W x 117mm H x 29mm D (3.3" x 4.6" x 1.15")
LCD DISPLAY	**Size:** 38.1mm x 16.5mm (1.5" x 0.65") **Digit Height:** 11.43mm (0.45") **Symbols:** °C, °F, %RH, OCC **Backlight:** Enable or disable via menu
TEMPERATURE	**Sensor:** Curve-matched thermistor **Accuracy:** ±0.2°C (±0.4°F) **Range:** 0 to 35°C (32 to 95°F) or 0 to 50°C (32 to 122°F) programmable **Offset:** ±5.0°C programmable **Display Units:** °C or °F programmable **Display Resolution:** 0.1° < 100, 1° > 100
TEMPERATURE SETPOINT	**Midpoint:** 18 to 27°C (65 to 80°F) programmable **Range:** ±2 to ±10°C (±5 to ±20°F) of the midpoint, programmable **Resolution:** 0.5 or 1.0°C and 1.0 or 2°F programmable
HUMIDITY	**Sensor:** Thermoset polymer based capacitive **Accuracy:** ±2, 3 or 5 %RH (5 to 95 %RH) **Range:** 0 to 100 %RH **Hysteresis:** ±0.8 %RH @ 25°C (77°F) **Response Time:** 8 seconds typical **Offset:** ±20 %RH programmable **Stability:** <0.25 %RH/year
HUMIDITY SETPOINT	**Midpoint:** 20 to 70 %RH programmable **Range:** ±5, ±10 or ±20 %RH of the midpoint, programmable **Resolution:** 1 %RH
OPTIONAL OCCUPIED INPUT (INCLUDED WITH OVERRIDE OPTION)	**Type:** Digital input, 0-5 Vdc standard, active low **Logic:** Active low or active high, programmable **Action:** Causes "OCC" segment to light on LCD
COUNTRY OF ORIGIN	Canada

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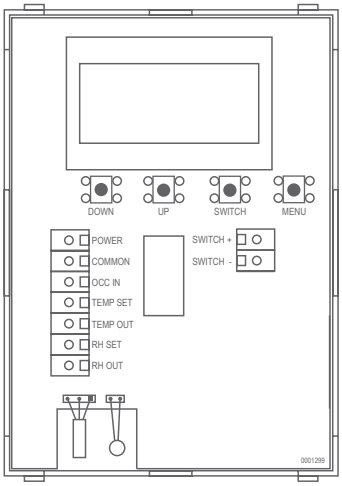
WIRING INFORMATION



TERMINAL	FUNCTION
PWR	+24 Vdc/ac
COM	Common
OCC IN	Digital Input
TEMP SET	Analog Output
TEMP OUT	Analog Output
RH SET	Analog Output
RH OUT	Analog Output
SWITCH +	Digital Output
SWITCH -	Digital Output

ORDERING

PRODUCT	**SPC**	Room Humidity/Temperature Transmitter
PRODUCT PARAMETERS	**01** **02** **04** **05** **06**	Humidity transmitter c/w setpoint control Temperature transmitter c/w setpoint control Humidity and temperature transmitter c/w temperature setpoint control Humidity and temperature transmitter c/w humidity setpoint control Humidity and temperature transmitter c/w humidity and temperature setpoint control
OUTPUT	**I** **V**	4-20 mA output 0-5 Vdc or 0-10 Vdc output, jumper selectable
ACCURACY (N/A FOR "02", LEAVE BLANK)	**02** **03** **05**	2% 3% 5%
OPTIONS	**S**	Override switch (includes OCC input)

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

PART NUMBER

SPC

RoHS COMPLIANT

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