GREYSTONE
ENERGY SYSTEMS INC

HIGH ACCURACY HUMIDITY / TEMPERATURE TRANSMITTER C/W SETPOINT ADJUSTMENTS

84 mm
3.3"

29 mm
1.15"

58 mm
2.3"

119 mm
4.7"

82.6 mm
3.25"
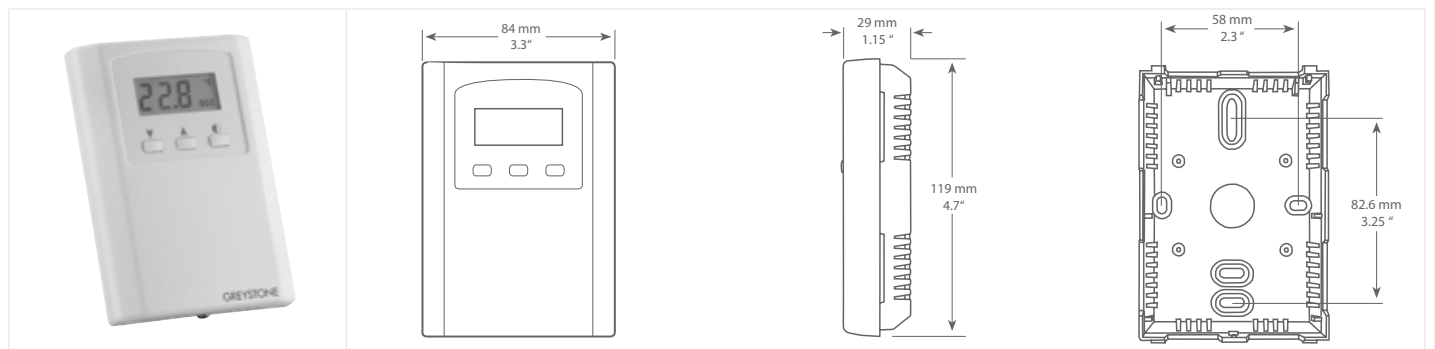
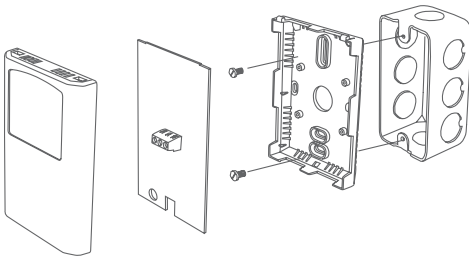### HASPC SERIES

PRODUCT DESCRIPTION

The HASPC series uses a highly accurate and reliable thermoset polymer based capacitance humidity sensor and curve matched thermistor together with state-of-the-art digital linearization and temperature compensated circuitry in an attractive, low profile enclosure to monitor room humidity & temperature levels. Dual setpoint adjustment features for both RH and temperature are also available. Additional options include manual override

TYPICAL INSTALLATION

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

The HASPC 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 push button and on-screen menu
OPERATING CONDITIONS	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	**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:** ±0.1°C (±0.18°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° to 1.0°C and 1.0° to 2°F programmable
HUMIDITY	**RH Sensor:** Thermoset polymer based capacitive **Accuracy:** ±1.5% or 2% (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 OVERRIDE	**Type:** Front panel, momentary push button, 2 wire dry contact **Switch Ratings:** N.O., SPST, 50 mA @ 12 Vdc,
OPTIONAL OCCUPIED INPUT (INCLUDED WITH OVERRIDE OPTION)	**Signal Type:** Digital input, 0-5 Vdc or dry contact to common **Logic:** Active low or active high, programmable **Action:** Causes "OCC" segment to light on LCD
COUNTRY OF ORIGIN	Canada

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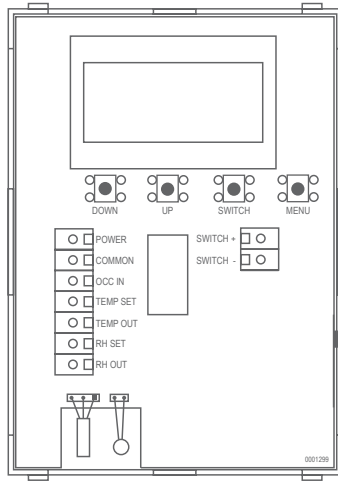
TERMINAL	FUNCTION
PWR	+24 Vdc/ac
COM	Common
TEMP SET	Analog Output
TEMP OUT	Analog Output
RH SET	Analog Output
RH OUT	Analog Output
SWITCH +	Digital Output
SWITCH -	Digital Output
OCC IN	Digital Input

ORDERING

PRODUCT	HASPC	High Accuracy Room Humidity/Temperature Transmitter
PRODUCT PARAMETERS	01	Humidity transmitter c/w setpoint control
	02	Temperature transmitter c/w setpoint control
	04	Humidity and temperature transmitter c/w temperature setpoint control
	05	Humidity and temperature transmitter c/w humidity setpoint control
	06	Humidity and temperature transmitter c/w humidity and temperature setpoint control
OUTPUT	I	4-20 mA output
	V	0-5 Vdc or 0-10 Vdc output, jumper selectable
ACCURACY (N/A FOR "02", LEAVE BLANK)	01	1.5%
	02	2%
OPTIONS	S	Override switch (includes OCC input)

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

PART NUMBER

HASPC