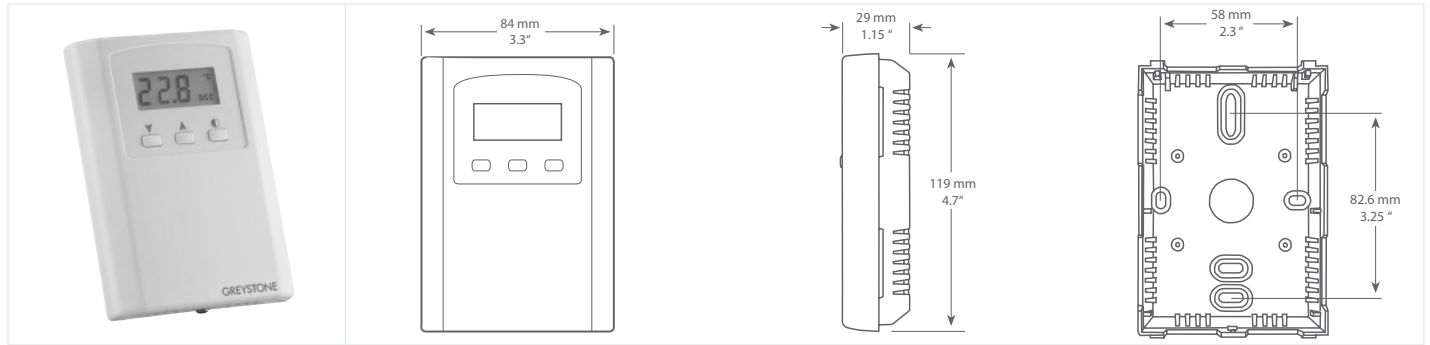




## HIGH ACCURACY HUMIDITY / TEMPERATURE TRANSMITTER C/W SETPOINT ADJUSTMENTS



### HASPC SERIES

#### PRODUCT DESCRIPTION

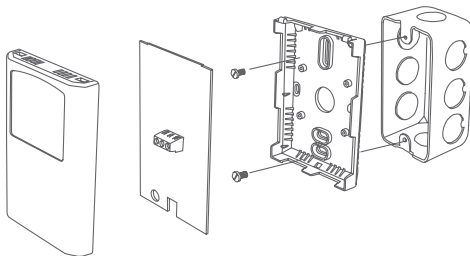
The HASPC series uses a highly accurate and reliable thermoset polymer based capacitance humidity sensor and curve matched thermistor together with state-of-the-art digital linearization and temperature compensated circuitry in an attractive, low profile enclosure to monitor room humidity & temperature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

#### 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.

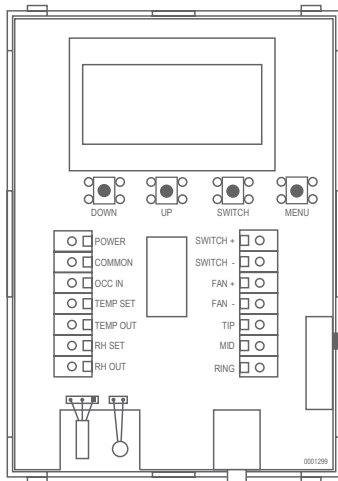


#### SPECIFICATIONS

<b>POWER SUPPLY</b>	24 Vac/dc $\pm 10\%$ (non-isolated half-wave rectified)
<b>CONSUMPTION</b>	20 mA + (20 mA x number of outputs) max @ 24 Vdc
<b>INPUT VOLTAGE EFFECT</b>	Negligible over specified operating range
<b>PROTECTION CIRCUITRY</b>	Reverse voltage and MOV protected and output limited
<b>OUTPUT SIGNALS</b>	4-20 mA active (sourcing) or 0-5 Vdc or 0-10 Vdc (specify when ordering)
<b>OUTPUT RESOLUTION</b>	10 bit for all signals
<b>OUTPUT DRIVE CAPABILITY</b>	<b>Current:</b> 550 $\Omega$ max <b>Voltage:</b> 10,000 $\Omega$ min
<b>PROGRAMMING AND SELECTION</b>	Pushbuttons and on-screen menu
<b>OPERATING CONDITIONS</b>	0 to 50°C (32 to 122°F) 0-95 %RH non-condensing
<b>WIRING CONDITIONS</b>	Screw terminal block (14 to 22 AWG)
<b>ENCLOSURE</b>	<b>Ratings:</b> White ABS - IP30 (NEMA 1) <b>Dimensions:</b> 84mm W x 117mm H x 29mm D (3.3" x 4.6" x 1.15") <b>Display Size:</b> 38.1mm x 16.5mm (1.5" x 0.65") <b>Digit Height:</b> 11.43mm (0.45") <b>Symbols:</b> °C, °F, %RH, OCC <b>Backlight:</b> Enable or disable via menu
<b>LCD DISPLAY</b>	
<b>TEMPERATURE</b>	<b>Accuracy:</b> $\pm 0.1^\circ\text{C}$ ( $\pm 0.18^\circ\text{F}$ ) <b>Range:</b> 0 to 35°C (32 to 95°F) or 0 to 50°C (32 to 122°F) programmable <b>Offset:</b> $\pm 9^\circ\text{F}$ programmable <b>Display Units:</b> °C or °F programmable <b>Display Resolution:</b> 0.5° < 100, 1° > 100
<b>TEMPERATURE SETPOINT</b>	<b>Midpoint:</b> 18 to 27°C (65 to 80°F) programmable <b>Range:</b> $\pm 2$ to $\pm 10^\circ\text{C}$ ( $\pm 5$ to $\pm 20^\circ\text{F}$ ) of the midpoint, programmable <b>Resolution:</b> 0.5° to 1.0°C and 1.0 to 2°F programmable
<b>HUMIDITY</b>	<b>Sensor:</b> Thermoset polymer based capacitive <b>Accuracy:</b> $\pm 1\%$ (30 to 70 %RH) $\pm 2\%$ (5 to 95 %RH) <b>Range:</b> 0 to 100 %RH <b>Temperature Compensation:</b> 0 to 50°C (32 to 122°F) <b>Hysteresis:</b> $\pm 3\%$ RH <b>Response Time:</b> 15 seconds typical <b>Stability:</b> $\pm 1.2\%$ RH typical @ 50 %RH in 5 years <b>Offset:</b> $\pm 20\%$ RH programmable
<b>HUMIDITY SETPOINT</b>	<b>Midpoint:</b> 20 to 70 %RH programmable <b>Range:</b> $\pm 5$ , $\pm 10$ or $\pm 20\%$ RH of the midpoint, programmable <b>Resolution:</b> 1 %RH
<b>MANUAL OVERRIDE</b>	<b>Type:</b> Front panel, momentary pushbutton, 2 wire dry contact <b>Ratings:</b> 50 mA @ 12 Vdc, N.O., SPST
<b>OCCUPIED INPUT</b>	<b>Signal Type:</b> Digital input, 0-5 Vdc or dry contact to common <b>Logic:</b> Active low or active high, programmable <b>Action:</b> Causes "OCC" segment to light on LCD
<b>FAN SPEED SWITCH</b>	<b>Type:</b> Side mounted, 5 position slide switch <b>Designators:</b> Off, Auto, Low, Medium, High <b>Signal:</b> 2 wire, resistance output at 0, 2, 4, 6, or 8 K $\Omega$ Custom ranges available, contact Greystone
<b>COMMUNICATIONS</b>	3.5mm phono jack, Ring/Mid/Tip connections to a 3 pin terminal block
<b>COUNTRY OF ORIGIN</b>	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
FAN +	Resistance Output
FAN -	Resistance Output
OCC IN	Digital Input
TIP	Digital Input
MID	Digital Input
RING	Digital Input

## ORDERING

PRODUCT	HASPC	High Accuracy 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)	01 02	1% 2%
OPTIONS	S J F	Override switch (includes OCC input) Comm. Jack (3.5mm phono) Fan speed switch

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

## PART NUMBER

HASPC