



GREYSTONE ENERGY SYSTEMS INC

HIGH ACCURACY ROOM HUMIDITY/TEMPERATURE TRANSMITTER HASPC Series

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.



SPECIFICATIONS:

| | |
|--------------------------------|--|
| Power Supply..... | 24Vac/dc ±10% (non-isolated half-wave rectified) |
| Consumption..... | 20 mA + (20ma x number of outputs) max @ 24 Vdc |
| Input Voltage Effect..... | Negligible over specified operating range |
| Protection Circuitry..... | Reverse voltage and MOV 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..... | 550 ohm max for current 10Kohm min for voltage |
| Programming and Selection..... | Via push buttons and on-screen menu |
| Operating Conditions..... | 0°-50°C (32°-122°F) 0-95%RH non-condensing |
| Wiring Connections..... | Screw terminal block (14 to 22 AWG) |
| Enclosure Size..... | 84mmW x 117mmH x 29mmD (3.3" x 4.6" x 1.15") |

LCD DISPLAY

| | |
|-------------------|-------------------------------|
| Display Size..... | 38.1 x 16.5 mm (1.5" x 0.65") |
| Digit Height..... | 11.43 mm (0.45") |
| Symbols..... | °C, °F, %RH, OCC |
| Backlight..... | Enable or disable via menu |

TEMPERATURE

| | |
|-------------------------|--|
| 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..... | ±9° F programmable |
| Display Units..... | °C or °F programmable |
| Display Resolution..... | 0.5° <100°, 1° >100° |

TEMPERATURE SETPOINT

| | |
|-----------------|--|
| Midpoint..... | 18° to 27°C or 65° to 80°F programmable |
| Range..... | ±2 to ±10°C or ±5 to ±20°F of the midpoint, programmable |
| Resolution..... | 0.5 or 1.0°C and 1.0 or 2°F programmable |

RH

| | |
|-------------------------------|--------------------------------------|
| Sensor..... | Thermoset polymer based capacitive |
| Accuracy..... | ±1% (30 to 70% RH) ±2% (5 to 95% RH) |
| Range..... | 0-100% RH |
| Temperature Compensation..... | 0° to 50°C (32° to 122°F) |
| Hysteresis..... | ± 3% RH |
| Response Time..... | 15 seconds typical |
| Stability..... | ±1.2% RH typical @ 50% RH in 5 years |
| Offset..... | ±20% RH programmable |

RH SETPOINT

| | |
|-----------------|---|
| Midpoint..... | 20 to 70% RH programmable |
| Range..... | ±5, ±10 or ± 20% RH of the midpoint, programmable |
| Resolution..... | 1% RH |

OVERRIDE

| | |
|-------------------------------------|---------------------------|
| Front panel, momentary push-button, | 2 wire dry contact |
| Switch ratings..... | N.O., SPST, 50 mA @12 Vdc |

PART NUMBER SELECTED

PRODUCT SELECTION INFORMATION:

| MODEL | Product Description |
|-------|---------------------------------------|
| HASPC | Room Humidity/Temperature Transmitter |

| CODE | 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 |

| CODE | Output |
|------|--|
| I | 4-20 mA output |
| V | 0-5 Vdc or 0-10 Vdc output - Jumper selectable |

| CODE | Accuracy (N/A for "02", leave blank) |
|------|--------------------------------------|
| 01 | 1% |
| 02 | 2% |

| CODE | Options |
|------|--------------------------------------|
| S | Override switch (Includes OCC input) |
| J | Comm. Jack (3.5 mm phono) |
| F | Fan speed switch |

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

OCCUPIED INPUT

| | |
|------------------|---|
| 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 |

FAN SPEED SWITCH

| | |
|-------------|--|
| Range..... | Off, Auto, Low, Medium, High |
| Signal..... | Resistance: 0, 2, 4, 6, 8 KΩ (Custom ranges available) |

NETWORK COMMUNICATIONS

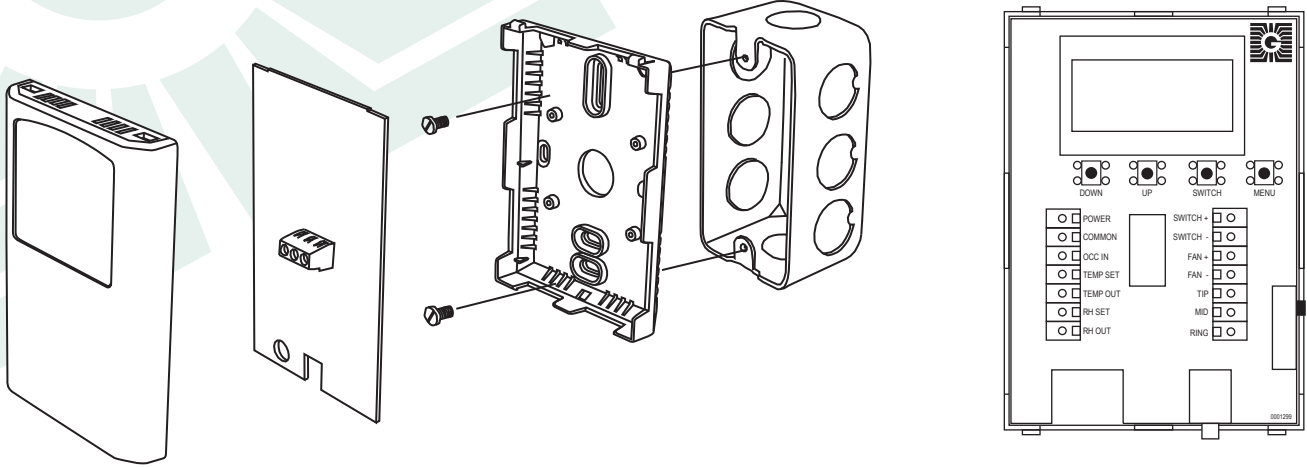
| | |
|-----------------------|--|
| 3.5mm phono jack..... | Ring/Mid/Tip connections to a 3-pin terminal block |
|-----------------------|--|

TYPICAL INSTALLATION:

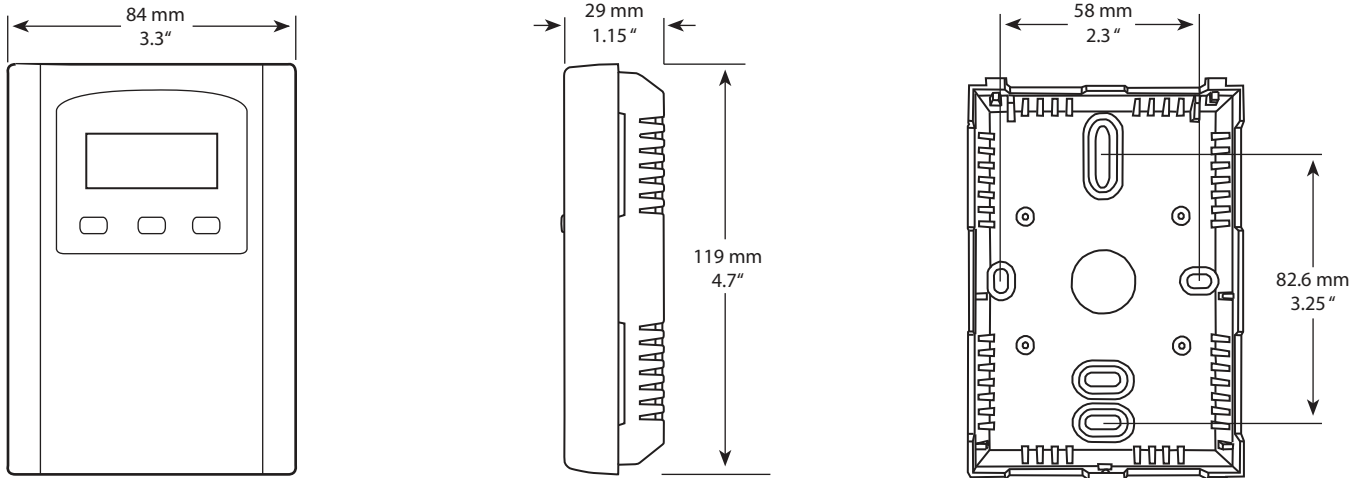
For complete installation and wiring details, please refer to the product installation instructions.

The HASPC series can be mounted directly to a single gang electrical box or directly to a wall. Insulating 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.



DIMENSIONS



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Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC sensors and transmitters for Building Automation Management Systems.

We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability.