

## PRODUCT DESCRIPTION

The outside humidity transmitter uses a highly accurate and reliable Thermoset Polymer based capacitance humidity sensor and state-of-the-art digital linearization and temperature compensated circuitry to monitor humidity levels. The sensor is encapsulated in a field replaceable sensor hub for protection from the elements. A weatherproof enclosure that provides ease of installation is provided. An optional integrated temperature sensor is available.

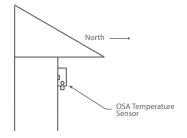
## TYPICAL INSTALLATION

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

The outside transmitter should be mounted on an outside North facing wall, under the eaves which will provide protection from direct sunlight and wind.

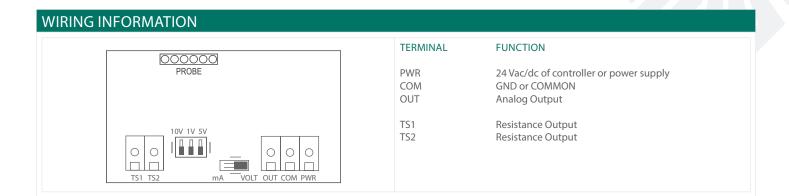
The outside transmitter can be mounted directly to buildings wall face using the provided mounting holes. There is a 0.86" hole for conduit connection of the back of the enclosure.

SPECIFICATIONS	
SENSOR TYPE	Thermoset polymer based capacitive
SENSOR ACCURACY	±2, 3, or 5 %RH (5 to 95 %RH)
MEASUREMENT RANGE	0 to 100 %RH
RESOLUTION	±0.01 %RH
HYSTERESIS	±0.8 %RH @ 25°C (77°F)
RESPONSE TIME	8 seconds
STABILITY	<0.25% RH/year
AMBIENT OPERATING RANGE	-40 to 60°C (-40 to 140°F)
POWER SUPPLY	24 Vac/dc ~ ±10% typical
CONSUMPTION	22 mA maximum @24Vdc, 70mA @24Vac
OUTPUT SIGNAL	4-20 mA current loop, 0-5 Vdc, 0-10 Vdc, or 0-1 Vdc (field selectable)
OUTPUT DRIVE @ 24 VDC	<b>Current:</b> $550\Omega$ max <b>Voltage:</b> $10,000\Omega$ min
OPTIONAL TEMPERATURE SENSOR	<b>Feed Through Sensor:</b> Various RTD's and thermistors available as 2 wire resistance output
ENCLOSURE	A: Polycarbonate, UL94-V0, IP65 (NEMA 4X) E: Same as A, with cable gland fitting
TERMINATION	Screw terminal block (14 to 22 AWG)
COUNTRY OF ORIGIN	Canada









ORDERING						
PRODUCT	HSOS	Outside Humidity Transmitter				
ENCLOSURE	A E	Polycarbonate with hinged and gasketed cover Same as A, with cable gland fitting				
RH ACCURACY	2 3 5	2% 3% 5%				
OPTIONAL TEMPERATURE SENSOR	00 02 05 06 07 08 12 13 14 20 24	No Temperature Sensor Option $100\Omega$ Platinum, IEC 751, 385 Alpha, thin film, 3 wire $1801\Omega$ NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ 3000 $\Omega$ NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ 10,000 $\Omega$ Type 3, NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ 2.252 K $\Omega$ NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ 1000 $\Omega$ Platinum, IEC 751, 385 Alpha, thin film $1000\Omega$ Nickel, Class B, DIN 43760 10,000 $\Omega$ Type 3, NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ c/w 11K shunt resistor 20,000 $\Omega$ NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ 10,000 $\Omega$ Type 2, NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ 10,000 $\Omega$ Type 2, NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ 10,000 $\Omega$ Type 2, NTC Thermistor, $\pm 0.2^{\circ}\text{C}$ 10,000 $\Omega$ Type 3, B = 3435 $\pm 1\%$ (25/85)				

PART NUMBER				
HSOS				

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

ORDERING - REPLACEMENT SENSOR MODULE			PART NUMBER
PRODUCT	HRMOS	Replacement Humidity Sensor Module - Hub	HRMOS
RH ACCURACY	2 3 5	2% 3% 5%	
OPTIONAL TEMPERATURE SENSOR	00 02 05 06 07 08 12 13 14 20 24	No Temperature Sensor Option $100\Omega$ Platinum, IEC 751, 385 Alpha, thin film, 3 wire $1801\Omega$ NTC Thermistor, $\pm 0.2^{\circ}$ C $3000\Omega$ NTC Thermistor, $\pm 0.2^{\circ}$ C $10,000\Omega$ Type 3, NTC Thermistor, $\pm 0.2^{\circ}$ C $2.525K\Omega$ NTC Thermistor, $\pm 0.2^{\circ}$ C $1000\Omega$ Platinum, IEC 751, 385 Alpha, thin film $1000\Omega$ Nickel, Class B, DIN 43760 $10,000\Omega$ Type 3, NTC Thermistor, $\pm 0.2^{\circ}$ C $10,000\Omega$ Type 3, NTC Thermistor, $\pm 0.2^{\circ}$ C $10,000\Omega$ NTC Thermistor, $\pm 0.2^{\circ}$ C $10,000\Omega$ NTC Thermistor, $\pm 0.2^{\circ}$ C $10,000\Omega$ Type 2, NTC Thermistor, $\pm 0.2^{\circ}$ C $10,000\Omega$ Syc 2, YTC Thermistor, $\pm 0.2^{\circ}$ C $10,000\Omega$ Syc 2, $\pm 0.2^{\circ}$ C $10,000\Omega$ Syc 3, $10.2^{\circ}$ C $1$	





