

## **PRODUCT DESCRIPTION**

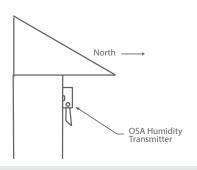
The outside humidity transmitter uses a highly accurate and reliable Thermoset Polymer based capacitance humidity sensor and state-of-the-art digital linearization and temperature compensated circuitry to monitor humidity levels. The sensor is encapsulated in a 12.7 mm (0.5") diameter 304 S/S probe and is field replaceable. A 60 micron HDPE filter protects the sensor for contaminants and a sun and windshield 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.

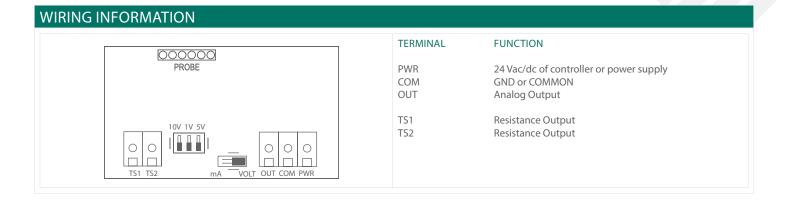
The outside transmitter can be mounted directly to buildings wall face using the provided mounting holes. There is a 0.86" hole for conduit connection of the back of the enclosure.



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)			
RESPONSETIME	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, 28 Vac/dc maximum			
CONSUMPTION	22 mA @ 24 Vdc, 70mA @24Vac			
OUTPUT SIGNAL	4-20 mA / 0-1 Vdc, 0-5 Vdc, or 0-10 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			
PROBE MATERIAL	304 series stainless steel with porous filter			
PROBE DIAMETER	12.7 mm (0.5")			
SUN AND WINDSHIELD	White polycarbonate, vented <b>Dimensions:</b> 132mm x 38mm (5.19" x 1.5")			
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	HSOB	Outside Humidity Transmitter with Sun and Wind Shield
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 $100\Omega \ Platinum, \ IEC 751, 385 \ Alpha, thin film, 3 \ wire \\ 1801\Omega \ NTC Thermistor, \pm 0.2^{\circ}C 3000\Omega \ NTC Thermistor, \pm 0.2^{\circ}C 10,000\Omega \ Type \ 3, \ NTC Thermistor, \pm 0.2^{\circ}C 2.252K\Omega \ NTC Thermistor, \pm 0.2^{\circ}C 1000\Omega \ Platinum, \ IEC 751, 385 \ Alpha, thin film 1000\Omega \ Nickel, \ Class \ B, \ DIN \ 43760 10,000\Omega \ Type \ 3, \ NTC \ Thermistor, \pm 0.2^{\circ}C \ c/w \ 11K \ shunt \ resistor \\ 20,000\Omega \ NTC \ Thermistor, \pm 0.2^{\circ}C 10,000\Omega \ Type \ 2, \ NTC \ Thermistor, \pm 0.2^{\circ}C 10,000\Omega \ Type \ 2, \ NTC \ Thermistor, \pm 0.2^{\circ}C 10,000\Omega \ 25^{\circ}C, \pm \%, \ B = 3435 \pm 1\% \ (25/85)$

PAR1	NUMBER
HSOB	

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

ORDERING - REPLACEMENT SENSOR MODULE			PART NUMBER
PRODUCT	HRMPB	Replacement Humidity Sensor Module - Probe	HRMPB
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 $100\Omega \ Platinum, \ IEC 751, 385 \ Alpha, \ thin film, 3 \ wire \\ 1801\Omega \ NTC Thermistor, \pm 0.2^{\circ}C 3000\Omega \ NTC \ Thermistor, \pm 0.2^{\circ}C 10,000\Omega \ Type \ 3, \ NTC \ Thermistor, \pm 0.2^{\circ}C 2.252K\Omega \ NTC \ Thermistor, \pm 0.2^{\circ}C 1000\Omega \ Platinum, \ IEC 751, 385 \ Alpha, \ thin film 1000\Omega \ Nickel, \ Class \ B, \ DIN \ 43760 10,000\Omega \ Type \ 3, \ NTC \ Thermistor, \pm 0.2^{\circ}C 10,000\Omega \ NTC \ Thermistor, \pm 0.2^{\circ}C 10,000\Omega \ NTC \ Thermistor, \pm 0.2^{\circ}C 10,000\Omega \ Type \ 2, \ Type \ 2$	





