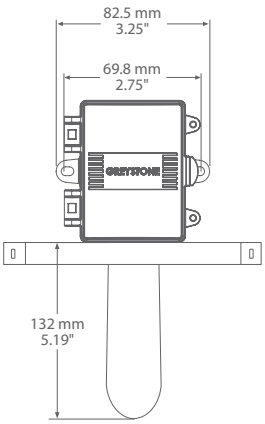
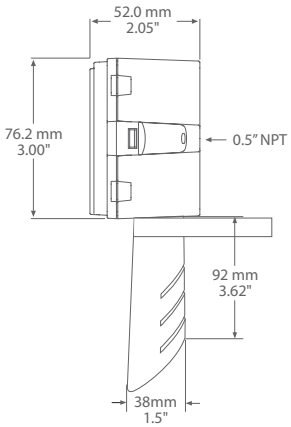
GREYSTONE
ENERGY SYSTEMS INC

OUTSIDE HUMIDITY TRANSMITTER





HSOB SERIES

PRODUCT DESCRIPTION

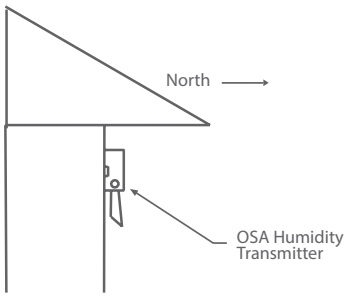
The outside humidity transmitter uses a highly accurate and reliable Thermoset Polymer based capacitance humidity sensor and state-of-the-art digital linearization and temperature compensated circuitry to monitor humidity levels. The sensor is encapsulated in a 12.7 mm (0.5") diameter 304 S/S probe. 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 Chip
SENSOR ACCURACY	±2, 3, or 5 %RH (5 to 95 %RH) @ 25°C
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)
OUTPUT SIGNAL	4-20 mA / 0-1 Vdc, 0-5 Vdc, or 0-10 Vdc (field selectable)
OUTPUT DRIVE @ 24 VDC	**Current:** 550Ω max **Voltage:** 10,000Ω min
OPTIONAL TEMPERATURE SENSOR	**Feed Through Sensor:** 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 **Dimensions:** 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)
PROTECTION CLASS	III
POWER SOURCE UL	24 Vac/dc ±10% typical, SELV (Class 2)
CONSUMPTION	22 mA @ 24 Vdc, 70 mA @ 24 Vac
EU CONFORMITY	CE
CERTIFICATION	UL 60730 & CSA E60730
PURPOSE OF CONTROL	Operating Control
ENCLOSURE	UL Enclosure Type 3R, Raintight
TYPE OF ACTION	Type 1
IMPULSE VOLTAGE	330V
POLLUTION DEGREE	4
COUNTRY OF ORIGIN	Canada

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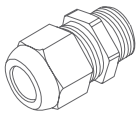
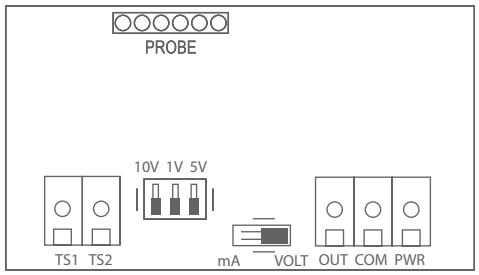
OPTIONAL ACCESSORIES - INCLUDED WITH E ENCLOSURE OPTION



CABLE GLAND FITTING

WIRING INFORMATION



TERMINAL	FUNCTION
PWR	24 Vac/dc of controller or power supply
COM	GND or COMMON
OUT	Analog Output
TS1	Resistance Output
TS2	Resistance Output

ORDERING

PRODUCT	**HSOB**	Outside Humidity Transmitter with Sun and Wind Shield
ENCLOSURE	**A**	Polycarbonate with hinged and gasketed cover
	E	Same as A, with cable gland fitting
RH ACCURACY	**2**	2%
	3	3%
	5	5%
OPTIONAL TEMPERATURE SENSOR	**00**	No Temperature Sensor Option
	02	100Ω Platinum, IEC 751, 385 Alpha, thin film, 3 wire
	05	1801Ω NTC Thermistor, ±0.2°C
	06	3000Ω NTC Thermistor, ±0.2°C
	07	10,000Ω Type 3, NTC Thermistor, ±0.2°C
	08	2.252KΩ NTC Thermistor, ±0.2°C
	12	1000Ω Platinum, IEC 751, 385 Alpha, thin film
	13	1000Ω Nickel, Class B, DIN 43760
	14	10,000Ω Type 3, NTC Thermistor, ±0.2°C c/w 11K shunt resistor
	20	20,000Ω NTC Thermistor, ±0.2°C
	24	10,000Ω Type 2, NTC Thermistor, ±0.2°C
	59	10,000Ω 25°C, ±%, B = 3435 ±1% (25/85)

PART NUMBER

HSOB

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

RoHS COMPLIANT

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