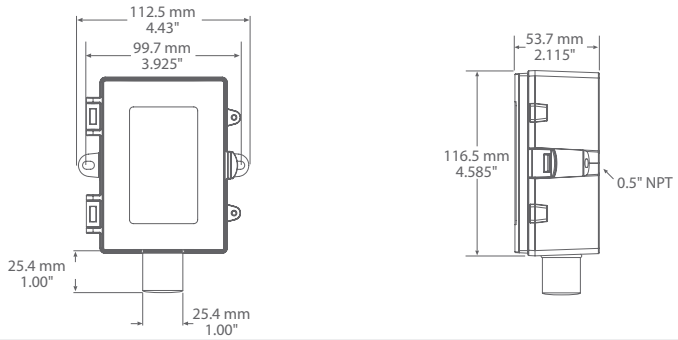
GREYSTONE
ENERGY SYSTEMS INC

OUTSIDE HUMIDITY/TEMPERATURE TRANSMITTER



HTOS SERIES

PRODUCT DESCRIPTION

The HTOS series uses a highly accurate and reliable Thermoset Polymer based capacitance humidity sensor and Platinum RTD temperature sensor together with state-of-the-art digital linearization and temperature compensated circuitry to monitor humidity levels. A hinged, gasketed weatherproof Polycarbonate enclosure provides easy of installation and protection from the elements.

TYPICAL INSTALLATION

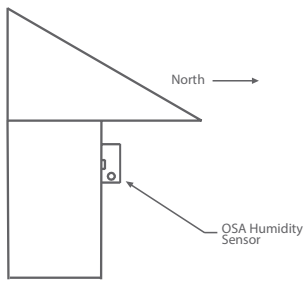
For complete installation and wiring details, please refer to the product installation instructions.

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

The HTOS can be mounted directly to buildings wall face using the four provided mounting holes. There is a 0.85" hole for conduit connection on rear of enclosure.

SPECIFICATIONS

HUMIDITY SENSOR TYPE	Thermoset polymer based capacitive
TEMPERATURE SENSOR TYPE	1000Ω Platinum, IEC 751, 385 Alpha, thin film
HUMIDITY SENSOR ACCURACY	±2, 3, or 5 %RH (5 to 95 %RH)
TEMPERATURE SENSOR ACCURACY	±0.1% of span
SENSOR RESPONSE TIME	15 seconds typical
MEASUREMENT RANGE	0 to 100 %RH
HYSTERESIS	±1.5 %RH maximum
REPEATABILITY	±0.5 %RH typical
LINEARITY	±0.5 %RH typical
OPERATING TEMPERATURE	-40 to 50°C (-40 to 122°F)
OPERATING HUMIDITY	0 to 95 %RH non-condensing
POWER SUPPLY	18 to 35 Vdc, 15 to 26 Vac
CONSUMPTION	22 mA maximum
INPUT VOLTAGE EFFECT	Negligible over specified operating range
PROTECTION CIRCUITRY	Reverse voltage protected and output limited
OUTPUT SIGNAL	4-20 mA current loop, 0-5 Vdc or 0-10 Vdc (factory configured)
OUTPUT DRIVE @ 24 VDC	**Current:** 550Ω max **Voltage:** 10,000Ω min
INTERNAL ADJUSTMENTS	Clearly marked ZERO and SPAN pots
ENCLOSURE	**B:** Grey Polycarbonate, UL94-V0, IP65 (NEMA 4X)
TERMINATION	Screw terminal block (14 to 22 AWG)
COUNTRY OF ORIGIN	Canada



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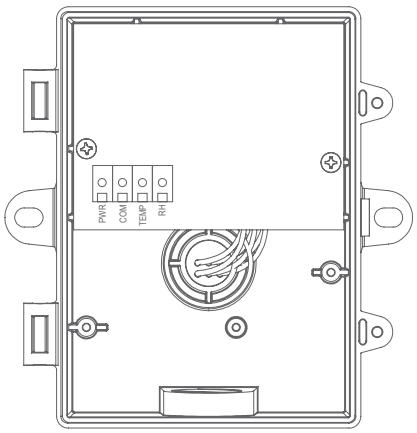
WIRING INFORMATION



TERMINAL	FUNCTION
PWR	24 Vac/dc
COM	Common
TEMP	Analog Output
RH	Analog Output

ORDERING

PRODUCT	**HTOS**	Outside Humidity/Temperature Transmitter
ENCLOSURE	**B**	Polycarbonate with hinged and gasketed cover
RH ACCURACY	**2** **3** **5**	2% 3% 5%
TEMPERATURE SENSOR	**12**	1000Ω Platinum, IEC 751, 385 Alpha, thin film
OUTPUT SIGNALS (RH AND TEMPERATURE)	**A** **D** **E**	4-20 mA 0-5 Vdc 0-10 Vdc
TEMPERATURE SPAN	**001** **002** **006**	0 to 35°C (32 to 95°F) 0 to 50°C (32 to 122°F) -50 to 50°C (-58 to 122°F)

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

PART NUMBER

HTOS

RoHS COMPLIANT

Greystone Energy Systems, Inc.
150 English Drive, Moncton,
New Brunswick, Canada E1E 4G7

Ph: +1 (506) 853-3057 Fax: +1 (506) 853-6014
North America: 1-800-561-5611
E-mail: mail@greystoneenergy.com

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