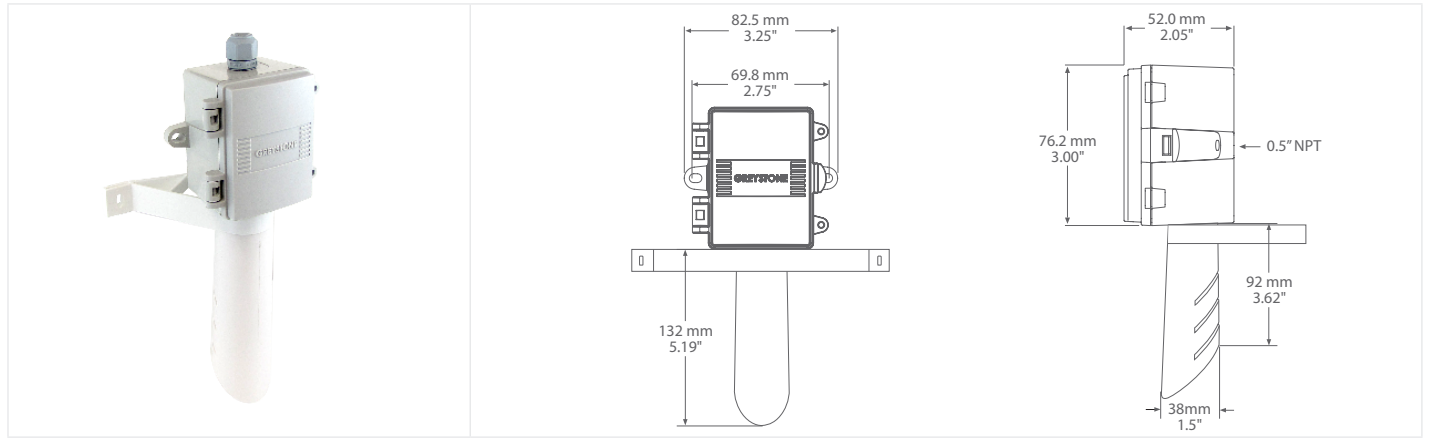


## NETWORK OUTSIDE HUMIDITY/TEMPERATURE SENSOR



### HNOB SERIES

## PRODUCT DESCRIPTION

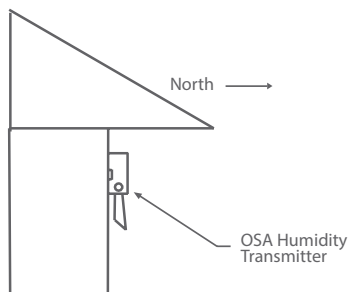
The outside air network humidity/temperature sensor uses a highly accurate and reliable Thermoset Polymer based capacitance humidity sensor and temperature sensor, that is field replaceable, to monitor humidity and temperature levels and transmit values via BACnet® or Modbus communication to a building automation system. A hinged, gasketed weatherproof Polycarbonate enclosure with sun and wind shield provides ease of installation and protection from the elements.

## TYPICAL INSTALLATION

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

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

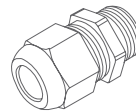
The outside sensor can be mounted directly to buildings wall face using the provided mounting holes. There is a 0.86" hole for conduit connection of the back of the enclosure.



## SPECIFICATIONS

<b>RELATIVE HUMIDITY</b>	<b>Accuracy:</b> ±2, 3, or 5 %RH (5 to 95 %RH) <b>Range:</b> 0 to 100 %RH <b>Resolution:</b> 0.01 %RH <b>Hysteresis:</b> ±0.8 %RH @ 25°C (77°F) <b>Response Time:</b> 8 seconds typical <b>Stability:</b> <0.25 %RH/year
<b>TEMPERATURE SENSOR</b>	<b>Sensor Accuracy:</b> ±0.2°C (±0.4°F) @ 0 to 70°C (32 to 158°F) <b>Probe Sensing Range:</b> -40 to 50°C (-40 to 122°F), 5 to 95 %RH non-condensing <b>Resolution:</b> 0.01°C/°F <b>Response Time:</b> 2 seconds <b>Stability:</b> <0.03°C/year
<b>NETWORK COMMUNICATION</b>	<b>Hardware:</b> MS/TP, 2-wire RS-485 <b>Software:</b> BACnet® or Modbus <b>Baud Rate:</b> 9600, 19200, 38400, 57600, 76800, or 115200 <b>Address Range:</b> BACnet® - 0 to 127 Modbus - 1 to 255
<b>OPTIONAL RELAY</b>	<b>Contacts:</b> 0.5 A @ 125 Vac / 1 A @ 24 Vdc <b>Setpoint:</b> Relative Humidity - 1 to 90 %RH or Temperature - 5 to 40°C (40 to 100°F)
<b>POWER SUPPLY</b>	24 Vac/dc ±10% typical, 28 Vac/dc maximum
<b>CONSUMPTION</b>	22 mA @ 24 Vdc, 70 mA @ 24 Vac
<b>OPERATING ENVIRONMENT</b>	-40 to 60°C (-40 to 140°F)
<b>PROBE MATERIAL</b>	304 S/S with porous filter and Sun/Wind Shield
<b>WIRING CONNECTION</b>	Screw terminal block (14 to 22 AWG)
<b>ENCLOSURE</b>	<b>A:</b> Polycarbonate, UL94-V0, IP65 (NEMA 4X) <b>E:</b> Same as A, with cable gland fitting
<b>DIMENSIONS</b>	82.5mm W x 76.2mm H x 52.0mm D (3.25" x 3.0" x 2.05")
<b>APPROVALS</b>	CE
<b>COUNTRY OF ORIGIN</b>	Canada

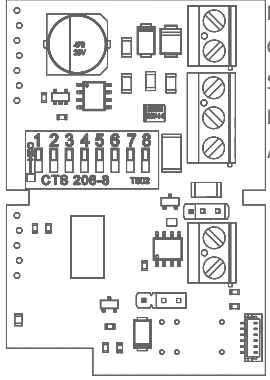
## OPTIONAL ACCESSORIES - INCLUDED WITH E ENCLOSURE OPTION



CABLE GLAND FITTING



## WIRING INFORMATION

	PWR	TERMINAL	FUNCTION
	COM	PWR	24 Vac/dc from controller or power supply
SHLD	COM	GND or COMMON	
B (+)	SHLD	Network Output	
A (-)	B (+)	Network Output	
	A (-)	Network Output	
RLY	RLY	Relay Output	
RLY	RLY	Relay Output	

ORDERING			PART NUMBER
PRODUCT	<b>HNOB</b>	Network Outside Humidity/Temperature Sensor	<b>HNOB</b>
ENCLOSURE	<b>A</b> <b>E</b>	Polycarbonate with hinged and gasketed cover Same as A, with cable gland fitting	
RH ACCURACY	<b>2</b> <b>3</b> <b>5</b>	2% 3% 5%	
OUTPUT	<b>B</b> <b>M</b>	BACnet® Modbus	
RELAY	<b>X</b> <b>R</b>	No Relay Relay	
CERTIFICATE	<b>-</b> <b>N</b>	None (leave blank) NIST Certificate	

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

REPLACEMENT SENSOR MODULE	<b>HRMPB200</b> <b>HRMPB300</b> <b>HRMPB500</b>	Relative Humidity/Temperature Probe Replacement, 2% Accuracy Relative Humidity/Temperature Probe Replacement, 3% Accuracy Relative Humidity/Temperature Probe Replacement, 5% Accuracy	
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