GREYSTONE ENERGY SYSTEMS INC

OUTSIDE TEMPERATURE SENSOR

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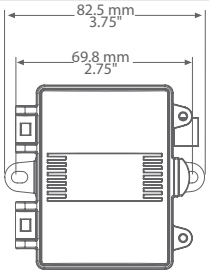
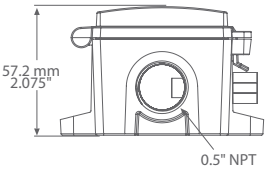




TSOS SERIES

PRODUCT DESCRIPTION

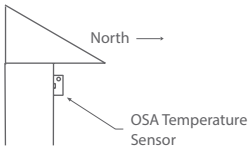
The single point outside air temperature sensor utilizes a precision sensor encapsulated in an aluminum probe. All probes are constructed to provide excellent heat transfer, fast response, and are potted to resist moisture penetration. A compact weatherproof Polycarbonate enclosure with a hinged and gasketed cover is provided for ease of installation.

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 to provide protection from direct sunlight.

The outside sensor can be mounted directly to the building's wall face using the provided mounting holes. A 0.85" hole for conduit connection or cable gland fitting is provided.



SPECIFICATIONS

SENSOR TYPE	Thermistors or RTD (see ordering chart)
SENSOR ACCURACY	**Thermistors:** ±0.2°C (±0.36°F) @ 25°C (77°F) **Platinum RTD's:** ±0.3°C (±0.54°F) @ 0°C (32°F) **Nickel RTD's:** ±0.4°C (±0.72°F) @ 0°C (32°F)
PROBE SENSING RANGE	-40 to 60°C (-40 to 140°F)
AMBIENT OPERATING RANGE	-40 to 60°C (-40 to 140°F), 5 to 95 %RH non-condensing
WIRE MATERIAL	PVC insulated, parallel bonded, 22 AWG
ENCLOSURE	**A:** Polycarbonate, UL94-V0, IP65 (NEMA 4X) **C:** same as A, includes terminal block **E:** Same as C, includes cable gland fitting
TERMINATION	**A:** Pigtail, 2 or 3 wire **C & E:** Terminal block, 2 or 3 wire
PROTECTION CLASS	III
POWER SOURCE UL	SELV, Limited Energy (<15W)
EU CONFORMITY	CE
CERTIFICATION	UL 60730 & CSA E60730
PURPOSE OF CONTROL	Temperature Sensor
ENCLOSURE	UL Enclosure Type 3R
TYPE OF ACTION	Type 1
IMPULSE VOLTAGE	330V
POLLUTION DEGREE	4
COUNTRY OF ORIGIN	Canada

ACCESSORIES - INCLUDED WITH E ENCLOSURE OPTION

CABLE GLAND FITTING

THREAD ADAPTER 1/2" NPT TO M16

ORDERING

PRODUCT		
	TSOS	Outside Temperature Sensor
ENCLOSURE	**A**	Polycarbonate, with hinged and gasketed cover
	C	Same as A, with terminal block
	E	Same as C, with thread adapter (1/2" NPT to M16) and cable gland fitting
SENSOR	**02X**	100 Ω Platinum, IEC 751, 385 Alpha, thin film
	05X	1801 Ω NTC Thermistor, ±0.2°C
	06X	3000 Ω NTC Thermistor, ±0.2°C
	07X	10,000 Ω Type 3, NTC Thermistor, ±0.2°C
	08X	2.252K Ω NTC Thermistor, ±0.2°C
	12X	1000 Ω Platinum, IEC 751, 385 Alpha, thin film
	13X	1000 Ω Nickel, Class B, DIN 43760
	14X	10,000 Ω Type 3, NTC Thermistor, ±0.2°C c/w 11K shunt resistor
	20X	20,000 Ω NTC Thermistor, ±0.2°C
	24X	10,000 Ω Type 2, NTC Thermistor, ±0.2°C
	59X	10,000 Ω, 25°C, ±1%, B = 3435 ±1% (25/85)

PART NUMBER

TSOS

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

RoHS COMPLIANT

c UL us LISTED

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