GREYSTONE ENERGY SYSTEMS INC

HIGH ACCURACY ALL PURPOSE TEMPERATURE TRANSMITTER HATXAP Series

The high accuracy all purpose single point temperature sensor utilizes a precision sensor encapsulated in a 6 mm (0.236") OD, 304 series stainless steel probe and is available in various lengths (see ordering chart). All probes provide excellent heat transfer, fast response and resistance to moisture penetration. A transmitter that provides a high accuracy signal with excellent long term stability, low hysteresis and fast response is available with various ranges is provided.

SPECIFICATION:

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Sensor Type	1000 ohm Platinum RTD				
Sensor Accuracy	RTD Class A: ±0.15°C @ 0°C				
	RTD 1/3 DIN: ±0.1°C @ 0°C				
	RTD 1/10 DIN: ±0.03°C @ 0°C	Ρ			
Probe Sensing Range	20 to 105°C (-4 to 221°F)	Ν			
Wire Material	PVC insulated, parallel bonded, 22 AWG				
Probe Material					
Probe Diameter	6 mm (0.236″)				
Standard Lengths	50, 100, 150, 200, 300, 450 mm				
	(2", 4", 6", 8", 12", 18")				
Output Signal	4-20 mA current loop, 0-5 Vdc, or 0-10 Vdc				
	(factory configured)				
Transmitter Accuracy	±0.125% of span, including linearity				
4-20 mA loop power supply	15-35 Vdc or 22-32 Vac				
Minimum Loop Current	2 mA nominal (occurs with shorted sensor)				
Maximum Loop Current	22.5 mA nominal (occurs with open sensor)				
Maximum Loop Load	>600 ohms				
0-5 Vdc Power Supply	10-35 Vdc or 10-32 Vac				
0-10 Vdc Power Supply	15-35 Vdc or 15-32 Vac				
Maximum Current (Voltage)	5 mA nominal				
Maximum Output (Voltage)	Limited to <5.5 Vdc for 0-5 Vdc, <10.5 for 0-10 Vdc	С			
Input Voltage Effect	Negligible over specified operating range				
Protection Circuitry	Reverse voltage protected and output limited				
Ambient Operating Range	0 to 50°C (32 to 122°F), 0 to 95% RH non-condens	sing			
Enclosure	ABS - UL94-V0, IP65 (NEMA4X)				
	E - includes thread adapter 1/2" NPT to M16),				
	and cable gland fitting				
Wiring Connections	Screw terminal block (14 to 22 AWG)				
Country of Origin	Canada				

PART NUMBER SELECTED

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PRODUCT SELECTION INFORMATION:

MODEL		Product Description									
HAT	ХАР	High Accuracy All Purpose Duct/Immersion Temperature Transmitter									
		CODE	Enclosure								
		A E	ABS, with hinged & gasketed cover Same as A, with thread adapter & cable gland fitting								
			CODE	Sensor							
			18 48 22 41 49 50	1000 1000 1000 1000	20 Ω, Platinum, 2 wire, IEC 751, 385 Alpha, thin film, Class A 20 Ω, Platinum, 2 wire, IEC 751, 385 Alpha, thin film, 1/3 DIN 20 Ω, Platinum, 2 wire, IEC 751, 385 Alpha, thin film, 1/10 DIN 20 Ω, Platinum, 3 wire, IEC 751, 385 Alpha, thin film, Class A 20 Ω, Platinum, 3 wire, IEC 751, 385 Alpha, thin film, 1/3 DIN 20 Ω, Platinum, 3 wire, IEC 751, 385 Alpha, thin film, 1/3 DIN 20 Ω, Platinum, 3 wire, IEC 751, 385 Alpha, thin film, 1/10 DIN						
				со	DE	Probe Len	gth				
		B 100 C 150 D 200 E 300		150 mm (6 200 mm (8 300 mm (1	0 mm (2") 00 mm (4") 50 mm (6") 00 mm (8") 00 mm (12") 50 mm (18")						
ng						CODE	Output				
						A D E	4-20mA 0-5 Vdc 0-10 Vdc				
							CODE	Scaled Range			
							001 002 003 006 *	0 to 35°C (32 to 95°F) 0 to 50°C (32 to 122°F) 0 to 100°C (-58 to 212°F) -50 to 50°C (-58 to 122°F) Additional Ranges Available			
		+	•			+	•				
reysto	one En	ergy System	s, Inc. reserve	s the ri	ght to	make design	modificatior	ns without prior notice.			



*This product is factory calibrated and any field adjustment will void the warranty.

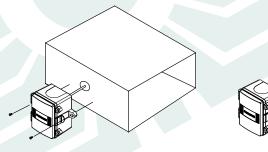


TYPICAL INSTALLATION:

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

The duct type probes are installed through a hole in the side of the duct to monitor a single point temperature within the duct. Since the probes are tip sensitive, select a probe length that places the sensor well into the duct. Install the probe in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification devices.

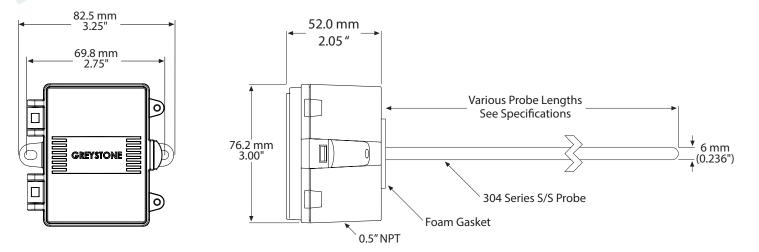
The enclosure provides mounting tabs for ease of installation.



Recommended thermowell placement

For immersion applications, T2 series thermowell is required.

DIMENSIONS:



Included with E style enclosure



Cable Gland Fitting



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Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC/R sensors and transmitters for Building Automation Management Systems. We have conscientiously established a worldwide reputation as an industry leader by maintaining leadingedge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability. 08/19