

PoE•X Thermocouple Sensor



General Description

The [Power-over-Ethernet \(PoE\) Thermocouple Sensor](#) is available with a hardwired thermocouple or K-type connector to support various thermocouple types and ranges. The hardwired thermocouple option measures temperatures up to 400°C (752°F).

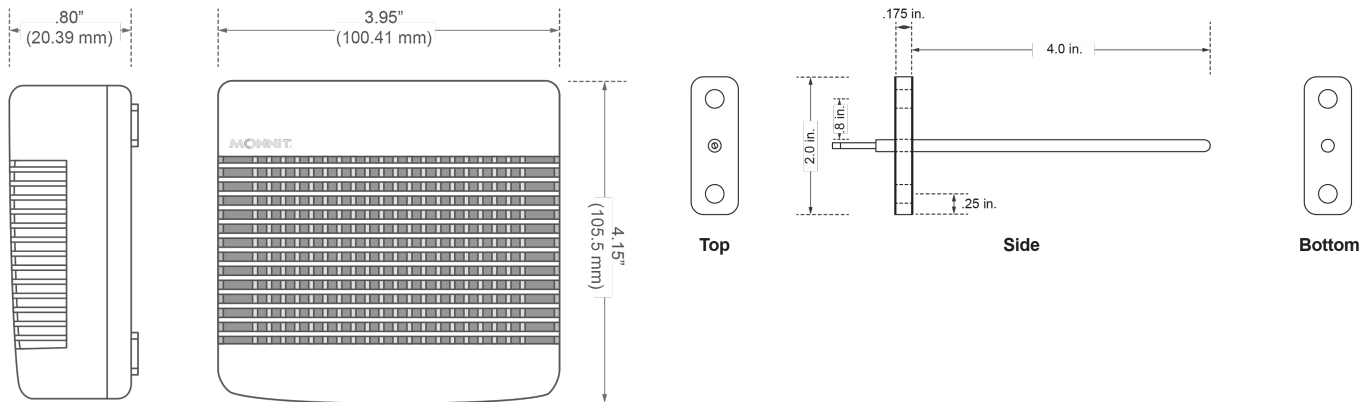
Monnit PoE•X Sensor Features

- Power-over-Ethernet ready (injector hardware required)
- Embedded LEDs for transmission & online condition indicators
- 50,000 sensor message memory (non-volatile)
- Modbus TCP & SNTP v1 interface capabilities
- No PC required (managed through apps and smart devices)
- Remote update capable w/automatic updates
- [Optional 5V DC power supply available](#)

Technical / Device Specifications

DEVICE SPECIFICATIONS	
Part Number	MNS-P-C1-TS-TC-HW
Communication Hardware	10 / 100 Ethernet Controller
PoE Requirements	Class 1 Device (500mW)
IEEE Standard Compliance	802.3AF-2003 / 802.3AT-2009 Class 1
Operation	Full- and Half-Duplex
Cross-Over Correction	Automatic MDI / MDI-X
Protocols Supported	DHCP, DNS, NTP, UDP, TCP, SNMP, Modbus TCP
Input Power	Supplementary Power Requirement
Cable Connector	RJ45
Supplementary Power Connector	2.1 x 5.5 mm barrel jack, center positive
Device Memory	Up to 50,000 sensor messages; varies based on sensor type. (Sensor messages will be stored in the event of Internet outage and transferred when connection is restored.)
Forced Communication / Reset Hardware	Button
Operating Temperature	-20 to +60°C (-4 to 140°F)
Storage Temperature	-40 to +85°C (-40 to 185°F)
SENSOR SPECIFICATIONS	
Thermocouple Probe	Type-K, 6 inches long with 1.6 inch by 0.6 inch flange between probe and connection cord
Thermocouple Connection Cord	6 ft long coil with glass braid insulation and metal overbraid
Hardwired Thermocouple Probe - Temperature Range	-100°C to +400°C (-148°F to +752°F)

Hardwired Thermocouple Probe - Accuracy above 0°C	+/- 2.2°C or 0.75% (whichever is greater)
Hardwired Thermocouple Probe - Accuracy below 0°C	+/- 2.2°C or 2.0% (whichever is greater)
Hardwired Thermocouple Response Time	60 Seconds in still water to reach 95% of actual temperature.
Weight	6.32 oz. (179 g)



THERMOCOUPLE DIAGRAM

Example Applications

- Chimney / Flue Temperature Monitoring
- Kiln Temperature Monitoring
- High Temperature Food Monitoring
- [And many more](#)

Notes

Software Compatibility

Currently Monnit PoE•X Sensors are only supported in iMonnit Online.

For more information about our products or to place an order, please contact our sales department at 801-561-5555. Visit us on the web at www.monnit.com.



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Change Log

Revision	Author	Date (yyyy/mm/dd)	Change
1	K Detro	2020/06/20	Original release.
2	K Detro	2021/08/30	Removed entry about Enterprise compatibility.