

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).

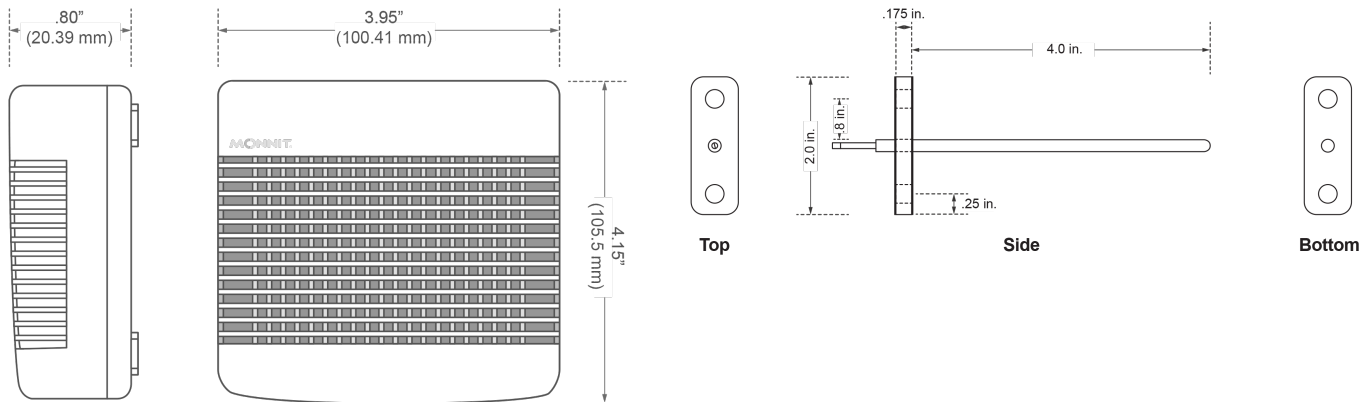
Monnit PoE•X Sensor Features

- 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
- Works with iMonnit Cloud and Enterprise software applications
- Optional 5V DC power supply available
 - [US Power Adapter](#)
 - [International Power Adapter](#)

Technical / Device Specifications

DEVICE SPECIFICATIONS	
Part Number	MNS-P-C1-TS-TC-HW
Communication Hardware	10 / 100 Ethernet Controller
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

Commercial Grade Sensors

Monnit commercial-grade sensors are designed for applications in ordinary environments (normal room temperature, humidity, and atmospheric pressure). Do not subject these sensors to the following, as these environmental aggressors could degrade the device and its performance, leading to failures and burn-out:

- Corrosive or deoxidizing gas, e.g., chlorine gas, hydrogen sulfide gas, ammonia gas, sulfuric acid gas, and nitric oxides
- Volatile or flammable gas
- Dusty conditions
- Extremely low or high pressures
- Wet or excessively humid locations
- Places where saltwater, oils, chemical liquids, or organic solvents are routinely present
- Applications/locations prone to excessive or strong vibration
- Other sites where similar hazardous conditions exist

Use these products within the Monnit-specified temperature range. Higher temperatures could deteriorate both the product and its functionality.

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.



Monnit Corporation
 3400 South West Temple • Salt Lake City, UT 84115 • 801-561-5555
www.monnit.com