

## PoE-X Low Temperature Sensor



### General Description

The [Power-over-Ethernet \(PoE\) Low Temperature Sensor](#) uses a glass coated platinum RTD transducer to accurately measure temperatures from -200°C to +162°C (-328°F to 325°F). The Low Temperature Sensor outputs the ambient temperature in degrees Celsius or Fahrenheit and alert the user when a temperature threshold has been crossed.

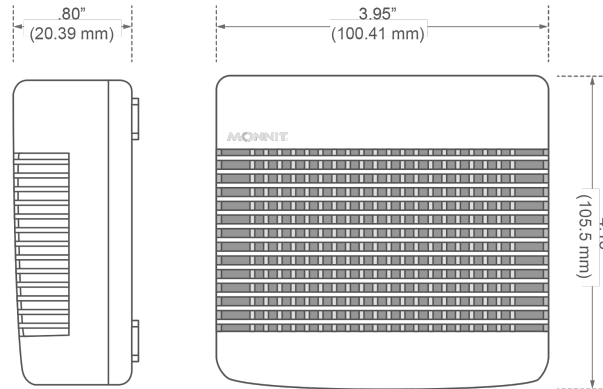
### Monnit PoE-X Sensor Features

- 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
  - [Optional Power Adapter](#)

## Technical / Device Specifications

DEVICE SPECIFICATIONS	
Part Number	MNS-P-C1-TS-LT-L03
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	
Sensing Element	DIN 43760 Class B
RTD Temperature Range (RTD and Cable Only)	-200°C to +162°C ( -328°F to +325°F )
RTD Temperature Accuracy @ 0°C	+/- 3.3°C Standard (+/- 0.5°C Calibrated)
Response Time	20 seconds max
Dissipation Constant	2mW/°C
Data Rate	Auto configures to best rate for maximum range.

Probe	Stainless steel metal probe tip (5mm diameter, 30mm length) (0.197 in. diameter, 1.18 in. length)
Weight	4.68 oz. (133 g)



## Example Applications

- Freezers and Coolers
- Smart Machines & Smart Structures
- HVAC Operation & Testing
- Environmental 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](http://www.monnit.com).



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