

PTSPS067 Infrared Temperature Sensor (Wired/Wireless)

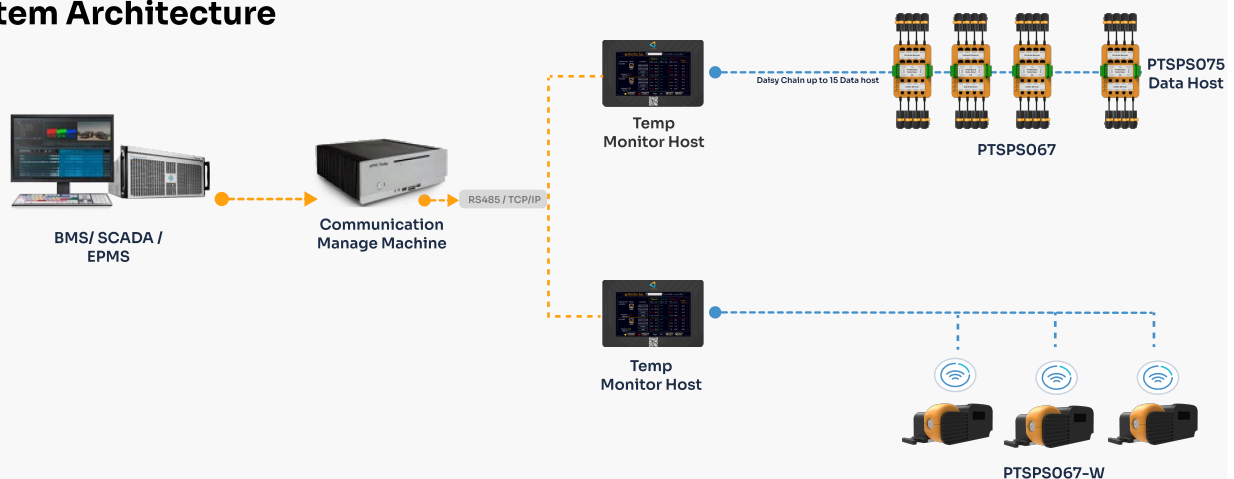
Product Overview

The PTSenR™ PTSPS067 is an intelligent infrared temperature monitoring system specifically engineered to proactively protect low- and medium-voltage electrical infrastructure from potential failures. By continuously monitoring the temperature of electrical contacts, it detects anomalies caused by oxidation, corrosion, loose connections, and other common fault conditions. This proactive capability helps prevent overheating, equipment degradation, short circuits, and unplanned power outages, thereby enhancing overall system reliability and grid stability.

The system incorporates advanced features such as industrial-grade sensor arrays for accurate and reliable temperature measurement, as well as state-of-the-art wired or wireless communication modules for seamless data transmission and integration with existing power management systems. A rotating infrared sensing mechanism further enhances coverage and detection accuracy within complex electrical enclosures.

Combining precision sensing, intelligent diagnostics, and robust communication capabilities, the PTSPS067 is a critical solution for ensuring the safe, efficient, and continuous operation of electrical assets, while supporting the advancement of modern smart grid infrastructure.

System Architecture



Applications

Non-intrusive temperature monitoring



Supports both wired and wireless data transmission for enhanced intelligence and flexibility



Single-point or Multi-point measurement



Characteristics

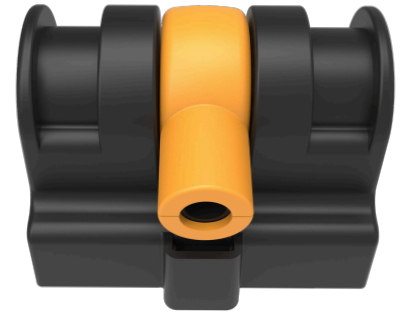
The PTSPS067 delivers a range of advanced capabilities, including planar thermal imaging for simultaneous single- or multi-point temperature assessment. Its intuitive, user-friendly interface ensures seamless operation and efficient data interpretation, while compatibility with a wide range of industrial communication protocols enables easy integration into existing systems.

The PTSPS067 is unique as it can be installed inside electrical panels to monitor key busbar or cable terminations according to NFPA70B & IEEE2969 to complement or replace traditional periodic infrared thermographic survey.

Related Products

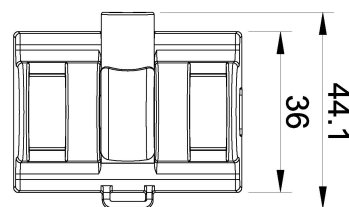
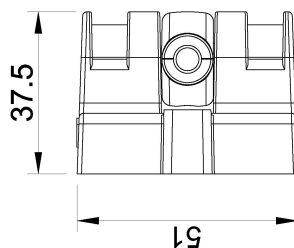
In addition to the PTSPS067 Infrared Temperature Sensor, product line includes:

- **PTSPS067-M:** A cutting-edge multi focal point infrared temperature sensor, providing comprehensive temperature monitoring and analysis.
- **PTSPS067-W:** A cutting-edge wireless infrared thermal sensor, offering versatile temperature monitoring and analysis without wired data transmission.



Dimensions - PTSPS067

(Unit: mm)

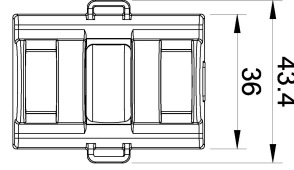
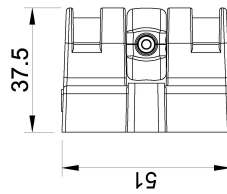


Specifications - PTSPS067

Temperature Measurement	Non-Contact Infrared	Measurement Accuracy	±1°C
Focus Point	Nominal 1:1 (distance : spot-size) 3.5°	Emissivity	0.95 ± 0.01
Spectral response	5 to 14 µm	Protection level	IP 40
Operational Voltage	5VDC (min 3VDC; max 5.5VCD)	Operating Temperature	-20°C ~ 80°C
Consumption	Operation Mode: 1.8mA Sleep Mode: 1.5uA	Temperature Sensing Range	-20°C ~ 300°C (-4°F ~ 540°F)
Data Transmission	RS 485	Storage Temperature	-20°C ~ 65°C
Material Flammability Rating	V 0 (700°C 30 Seconds)	Measurement Resolutions	0.1°C
Response time	Nominal 1 sec / time	Compliance	EN 62479; EN 61326; EN 220, 300, 301, 400, 489
Altitude	≤4000 meters	Installation Mode	Cable Tie
Relative Humidity	≤95% RH (non-condensing)	Ordering Information	
Measurement Distance	10 cm - 50 cm	Part Number	Product Description
Transmission interval	30 seconds to 180 seconds	PTSPS067	PTSenR™ Single FOV Infrared Temperature Sensor (Wired)

Dimensions - PTSPS067-M

(Unit: mm)



Specifications - PTSPS067-M

Temperature Measurement	Non-Contact Infrared
Focus Point	90° x 90° (1024 points)
Spectral response	5 to 14 um
Operational Voltage	5VDC (min 3VDC; max 5.5VCD)
Consumption	Operation Mode: 1.8mA Sleep Mode: 1.5uA
Data Transmission	RS 485
Material Flammability Rating	V 0 (700°C 30 Seconds)
Response time	Nominal 1 sec / time
Altitude	≤4000 meters
Relative Humidity	≤95% RH (non-condensing)
Measurement Distance	10 cm - 50 cm
Transmission interval	30 seconds to 180 seconds

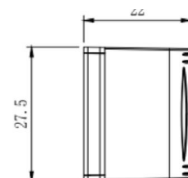
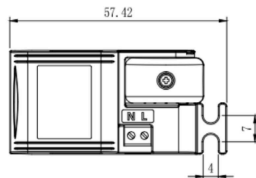
Measurement Accuracy	±1°C
Emissivity	0.91 ± 0.01
Protection level	IP 40
Operating Temperature	-20°C ~ 80°C
Temperature Sensing Range	-20°C ~ 300°C (-4°F ~ 540°F)
Storage Temperature	-20°C ~ 65°C
Measurement Resolutions	0.1°C
Compliance	EN 62479; EN 61326; EN 220, 300, 301, 400, 489
Installation Mode	Cable Tie

Ordering Information

Part Number	Product Description
PTSPS067-M	PTSenR™ Multi FOV Infrared Temperature Sensor (Wired)

Dimensions - PTSPS067-W

(Unit: mm)



Specifications - PTSPS067-W

Temperature Measurement	Non-Contact Infrared
Focus Point	2.1 mm
Aperture	0.8
FOV	90° x 90° (1024 points)
Energy Harvesting	5 A ~ 10,000 A (Optional)
Operational Voltage	EH or 7.5 Vac ~ 275 Vac (direct) EH or 3.6 Vdc (direct)
Wireless Operational Bandwidth	433.92 MHz
Transmission Power	10 dBm
Wireless Transmission Distance	0 meters ~ 20 meters (Enclosed) / 300 meters (Open Space)
Altitude	≤4000 meters
Measurement Accuracy	±1°C (Spacing 10cm)
Measurement Distance	10 cm - 50 cm
Transmission interval	30 seconds to 180 seconds (the higher the temperature, faster the data sending)

Relative Humidity	≤95% RH (non-condensing)
Measurement Interval	10 sec / time
Protection level	IP 50
Operating Temperature	-20°C ~ 65°C
Temperature Measuring Range	-20°C ~ 500°C
Storage Temperature	-20°C ~ 65°C
Material Flammability Rating	V 0 (700°C 30 Seconds)
Compliance	EN 62479; EN 61326; EN 220, 300, 301, 400, 489
Installation Mode	Alloy Strip Bundling / Screw Fastening / Magnet absorption

Ordering Information

Part Number	Product Description
PTSPS067-W	PTSenR™ Infrared Temperature Sensor (Wireless)