

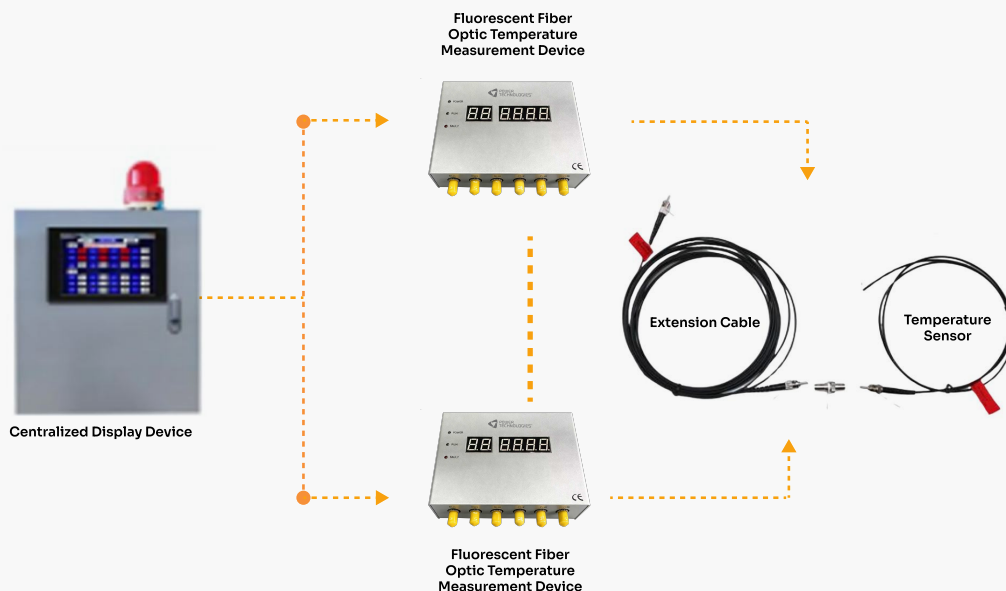
PTSSL 3/6/9/12 Fiber Optic Point Temperature Sensor

Product Overview

The PTSenR™ PTSSL 3/6/9/12 are advanced Fluorescent Fiber Optic Temperature Measurement Devices designed to provide accurate, real-time monitoring in high-voltage electrical environments. Engineered to predict faults and prevent electrical fires, these devices excel in monitoring temperature abnormalities in critical equipment such as switch cabinets, cable joints, and transformers. Immune to electromagnetic interference, the fiber optic sensors ensure safe, precise, and reliable thermal management, particularly in harsh electromagnetic and industrial environments.

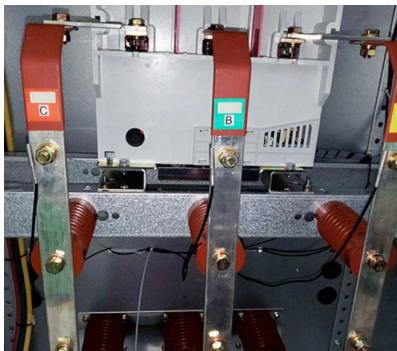
Their contact-based installation allows for direct monitoring of high-voltage components, facilitating early detection of failures in systems where insulation degradation and poor contact could pose risks. These devices provide reliable, high-precision temperature monitoring solutions for special industrial applications that require enhanced safety and performance under extreme conditions.

System Architecture

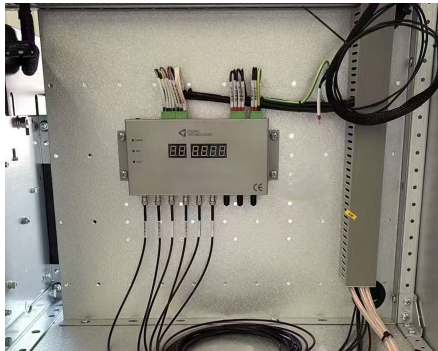


Applications

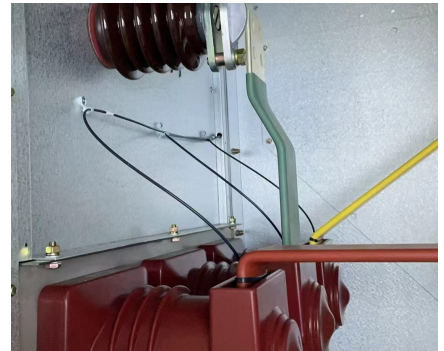
Cable Joints and Switch Contact Monitoring



Electromagnetically Noisy Environments



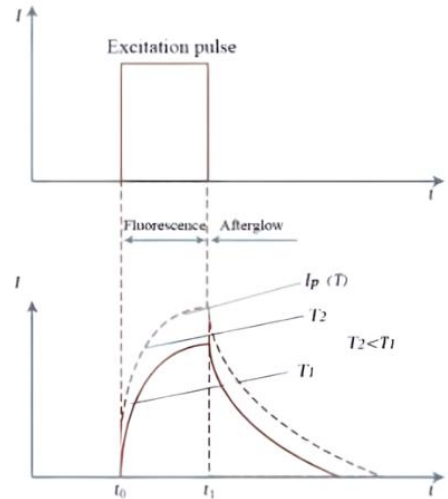
High-Voltage Electrical Equipment Monitoring



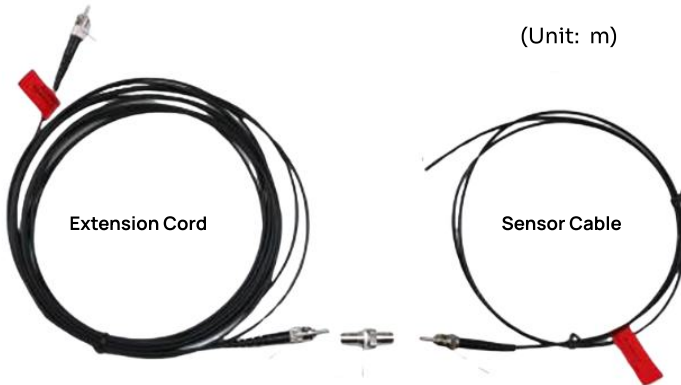
Characteristics

The PTSenR™ PTSGL 3/6/9/12 devices use fluorescent fiber optic technology to measure temperature by detecting the decay of fluorescence after the material is excited by light. The decay rate varies with temperature, allowing precise monitoring at the measurement point. Immune to electromagnetic interference, these devices are ideal for high-voltage environments, offering reliable performance under harsh conditions.

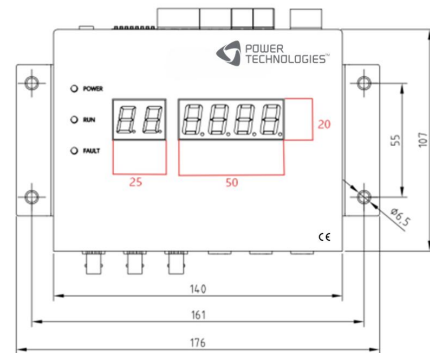
Their compact design ensures easy installation, while advanced communication interfaces enable seamless system integration. Dual alarm levels provide early warning of temperature anomalies, ensuring timely intervention to prevent system failures. With a robust industrial safety design to ensure stability. They support both wall-mounted and rail-mounted installation options, providing flexibility for various setups.



Dimensions



1.2m sensor cable + 4m extension cord (6m or 8m extension cord can be customized)



3 Channels

Specifications

Model	PTSGL series
Number of Channels	3 / 6 / 9 / 12
Temperature Measurement Range	-40°C ~ +200°C
Temperature Measurement Accuracy	±0.5°C
Temperature Measurement Resolution	0.1°C
Power Supply	100~240 VAC , 50 / 60 hz
Power Consumption	<3 W
Communication Interface	RS 485 / Modbus RTU
Relay Output	2 relays (250VAC / 5A)
Fiber Optic Connector	Standard ST Type
Fiber Sensor Probe Diameter	Φ 3.0 mm (±0.1mm)
Extension Fiber Diameter	Φ 2.2 mm (±0.1mm)
Fiber Probe Withstand Voltage	100kV
Fiber Length	1.2 m sensor cable + 4 m extension cord , Max length including sensor cable would be 5.2 meters. (6 m or 8 m extension cord can be customized)

Operating Condition	-20°C ~ +55°C <90% (25°C)
Alarm Level	Out 1 Fault Alarm. Out 2 Over-Temperature alarm.
Display Method	RS485 connected to LCD display (optional)
Dimension (Length X Width X Thickness)	3 channel - 140*107*35 (mm) 6 channel - 140*107*35 (mm) 9 channel - 202*107*35 (mm) 12 channel - 145*107*51.5 (mm)
LED Display Specifications	25*20 (mm), 50*20 (mm)
Mounting	Panel Mount
Compliance	EN 61326; EN 61010; ISO 16750-3

Ordering Information

Part Number	Product Description
PTSGL3	PTSenR™ Fiber Optic Point Temperature Sensor - 3 Points
PTSGL6	PTSenR™ Fiber Optic Point Temperature Sensor - 6 Points
PTSGL9	PTSenR™ Fiber Optic Point Temperature Sensor - 9 Points
PTSGL12	PTSenR™ Fiber Optic Point Temperature Sensor - 12 Points