

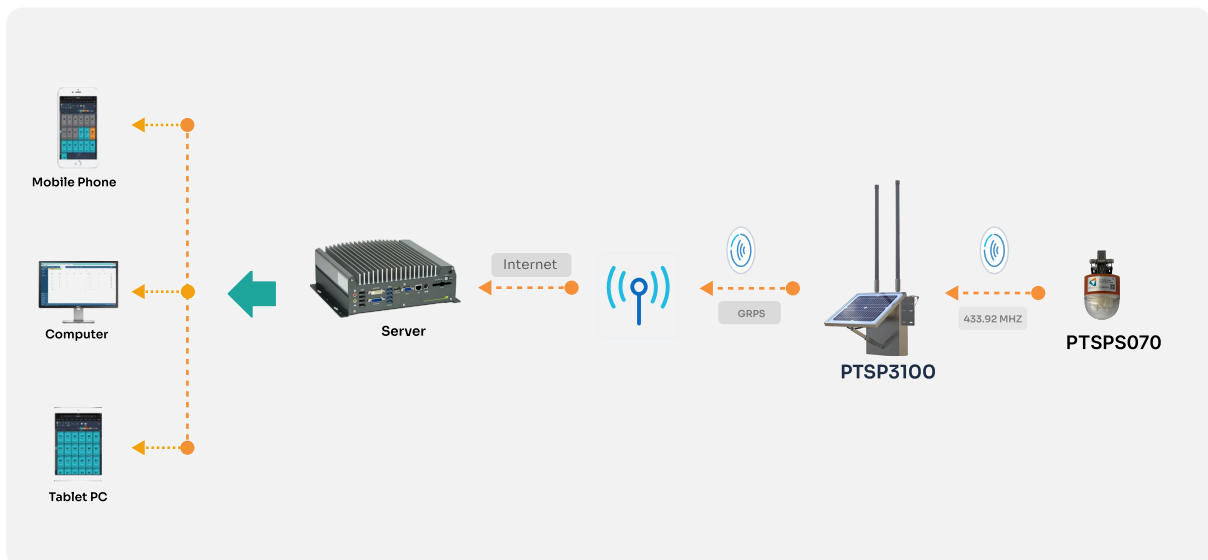
PTSPS070 OverHead Line Temperature Sensor

Product Overview

The PTSenR™ PTSPS070 Overhead High Voltage Cable Clamp Temperature Sensor is an advanced solution for monitoring the temperature of high voltage cable clamps in outdoor environments. Leveraging electromagnetic energy harvesting, it eliminates the need for an external power source, ensuring efficient and cost-effective operation. The sensor boasts a rugged design with IP68 protection, making it highly durable in harsh conditions. Its wireless transmission capability allows for a broad range of communication, significantly reducing the cost and complexity of the receiving system.

By providing early warnings for over-temperature conditions, the PTSPS070 plays a critical role in preventing equipment failures and enhancing the reliability of high voltage cable systems. Compliance with stringent EU directives further underscores its quality and reliability, making it an indispensable tool for maintaining the safety and efficiency of power supply systems.

System Architecture



Applications

Hotspot Detection, Prevent ARC Flash

Contribution to the Development of a Smart Grid

Enhancement of Power Supply System Reliability



Characteristics

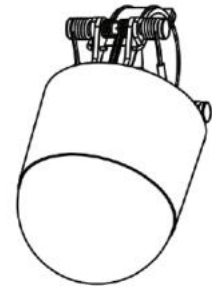
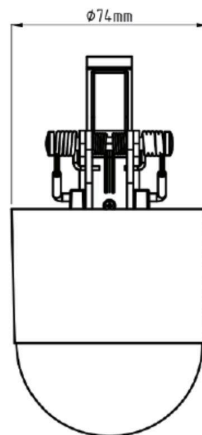
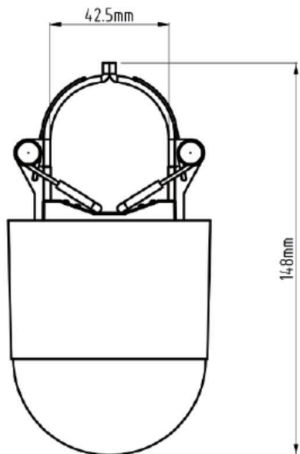
The PTSenR™ PTSPS070 harnesses energy from the cable's current flow, enabling maintenance-free, continuous operation without the need for batteries. It is versatile and adaptable, supporting a wide range of high voltage applications. The sensor's wireless communication is facilitated through a wireless protocol bandwidth, providing extensive transmission capabilities. Built for extreme conditions, it operates effectively at high altitudes and in humid environments.

It accurately measures a broad spectrum of temperatures, ensuring precise monitoring. The sensor's robust design includes a high level of protection and flame retardant, guaranteeing its safety and reliability. Adhering to various EU directives and CE standards, the PTSPS070 promises a long service life and features easy installation through a clip-on spring bundling mechanism.



Dimensions

(Unit: mm)



Specifications

Operation Supply	Energy Harvesting (Voltage & Battery Free)
Energy Harvesting (EH)	5 A ~ 10,000 A
Operational Voltage	110 kV ~ 1000 kV
Wireless Operating Bandwidth	433.92 MHz
Transmission Power	10 dBm
Wireless Transmission Distance	upto 500 meters (open space)
Altitude	≤4000 meters
Allowable Max Fault Current	20 kA/1 second
Relative Humidity	≤95% RH (non-condensing)
Operating Temperature	-20°C ~ 85°C
Temperature Measuring Range	-20 ~ +125°C
Temperature Measurement Type	Contact-Type

Measurement Accuracy	±1°C
Protection Level	IP 68
Flammability Rating	V 0 (700°C 30 seconds)
Installation Mode	Clip on Spring Bundling
Certification	EN 62479; EN 61326; EN 220, 300, 301, 400, 489
Communication Protocol	Standard Modbus-RTU protocol

Ordering Information

Part Number	PTSPS070
Product Description	PTSenR™ HV Cable Clamp Temp Sensor