

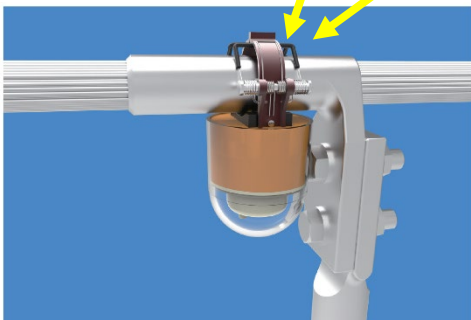
### Product Overview

The PTSenR PTSPS070 Overhead High Voltage Cable Clamp Temperature Sensor is mainly applied in temperature measurement of high voltage cable clamp outdoor. It uses electromagnetic energy harvesting, with IP68 protection and 500m wireless transmission distance, can effectively reduce the cost of the receiving device and solve the over temperature early warning problem of high voltage cable clamp.

In the long-term operation process, the high voltage cable joints, itself will inevitably increase the contact resistance due to oxidation and corrosion of the surface, loose fastening bolts and other reasons, which will cause heating and electric corrosion of the contact parts. In serious cases, the connecting parts can be burned and short-circuit fault can be caused, resulting in large-scale power failure. Thus, the reliability of power supply system is reduced, resulting in significant economic losses. Therefore, the implementation of on-line temperature detection of high-voltage cable, timely detection and treatment of hidden dangers before equipment failure is an important part to ensure the safe operation of power and build a strong smart grid.

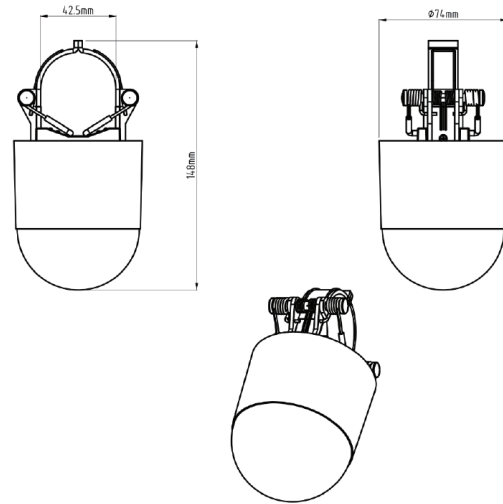
Thermal imager is a kind of equipment which can detect the thermal pattern in the infrared wavelength spectrum without direct contact with the equipment. It is mainly used for non-destructive testing, and different from ordinary infrared temperature measurement, which focuses on the measurement of point temperature. But the thermal imager is planar imaging, which can realize multi-point temperature measurement at the same time. Due to the high technical threshold and large industry span of infrared thermal imager, there are not many domestic manufacturers of this kind, mainly are acting as agents while researching and developing independently.

### Installation

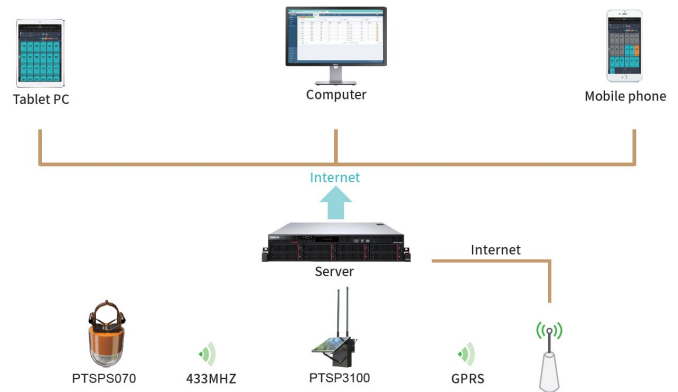


### Dimensions

Unit: mm



### The System Architecture



### Specification

Operation Supply	Voltage & Battery Free
Energy Harvesting (EH)	5A ~ 6000A
Operational Voltage	110kV ~ 500kV
Wireless Operating Bandwidth	433MHz (Zigbee)
Transmission Power	10dBm
Wireless Transmission Distance	500meter (open space)
Altitude	≤4000m
Allowable Max Fault Current	20kA/1sec
Relative Humidity (RH)	≤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)	IP68
Flame retardant grade	V0 (700°C 30 Sec)
Service life	10 years
Installation Mode	Clip on Spring Bundling
Certification	CE – EN 61000-6-2:2005+AC, EN 61000-6-4:2007+A1:2011, EN 62366-1:2014+A11:2017

### Ordering Information

Part Number	Product Description
PTSPS070	PTSenR HV Cable Clamp Temp Sensor

