

Product Overview

The PTSenR PTSPS069 Cable Plug Wireless Temperature Sensor is developed to monitor the cable contact of medium voltage equipment. With the improvement of the technical level of the power grid, more and more medium-voltage equipment is connected by cables, especially in plateau areas, as well as more inflatable switchgears are used.

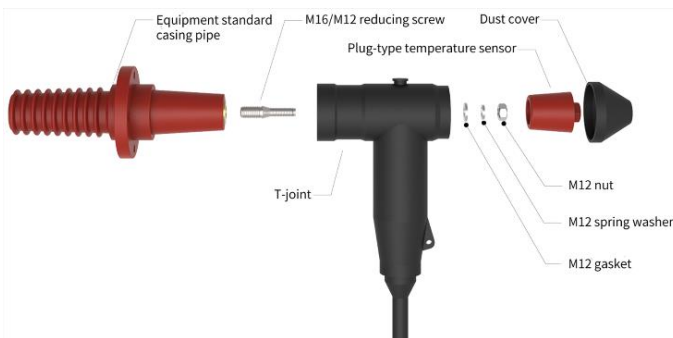
Due to more and more medium-voltage equipment such as ring main units, cable branch boxes, and inflatable switchgears used, the power supply sector is facing more and more cable faults, among which heat problems caused by cable insulation and poor contact account for more than 80% of the number of faults. Partial discharge caused by insulation damage and poor contact of the wire core can be manifested as heating at the fault point, and the hidden danger of failure can be grasped by monitoring the heating situation of relevant parts.

The PTSenR PTSPS069 adopts ultra-low power consumption design, electric field can take power and other technologies, and has the characteristics of easy installation, strong anti-interference ability and reliable operation. It can collect the temperature data of the electrical nodes of medium-voltage equipment such as ring main units, cable branch boxes, and inflatable switch cabinets, and send the temperature data to the receiving terminal through wireless communication.

The System Architecture



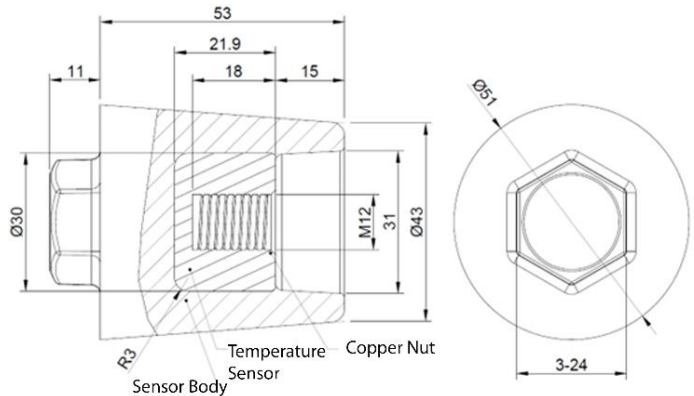
Application



Features

1. Data is transmitted wirelessly.
2. High-precision acquisition and perception.
3. Electric field operated.
4. Maintenance free.
5. Calibration free.
6. Easy to install.
7. Compact size.
8. Strong anti-interference EMF & EMI.

Dimensions



Specification

Power Supply Input Voltage	Electrical Field Energy (2phase voltage AC 4.6kV)
Partial Discharge	AC16kV, ≤10pC
Operational Voltage	6.6kV ~ 36kV
Wireless Operating Bandwidth	433.92MHz (Zigbee)
Transmission Power	10dBm
Wireless Transmission Distance	0.4 ~ 20 meter (enclosed) / ≤100meter (open space)
Communication rate	10 kbps
Temperature measurement type	Direct Contact-type
Relative Humidity (RH)	≤95%RH (non-condensing)
Storage Temperature	-40°C ~ 85°C
Operating Temperature	-40°C ~ 85°C
Temperature measuring range	-40 ~ 125°C
Measurement accuracy	±2.0°C
Measurement interval	1 ~ 5 minutes
Protection level (IP)	IP67
Flame retardant grade	V0 (700°C 30 Sec)
Service life	10 years
Certification	CE – EN 61000-6-2:2005+AC; 2014/30/EU ELECTROMAGNETIC COMPATIBILITY DIRECTIVE EN 61000-6-4:2007+A1:2011; EN 62366-1:2014+A11:2017

Ordering Information

Part Number	Product Description
PTSPS069	PTSenR Cable Plug Wireless Temperature Sensor

