

Product Overview

PTSenR PTSPS105 have ability Sensor for passive wireless arrester is also known as arrester leakage current and action recorder. It is used in combination with zinc oxide arrester in the high voltage AC power system through tandem connection with the ground loop of the zinc oxide arrester. The ampere meter is installed in the monitor to supervise the leakage current through the arrester under the operating voltage. It can judge whether the arrester is damp inside, whether the component is abnormal, and record the overvoltage action number of the arrester.



Conventional monitor depends on pointer type milliampere meter and mechanical counter to indicate leakage current and lightning times, which requires regular manual inspections in data check. The passive wireless

arrester monitors the present leakage current value and lightning times using the sensor. This product can send wireless data and upload data to the background via the data receiving terminal, thus eliminating the need for manual inspection.



Application

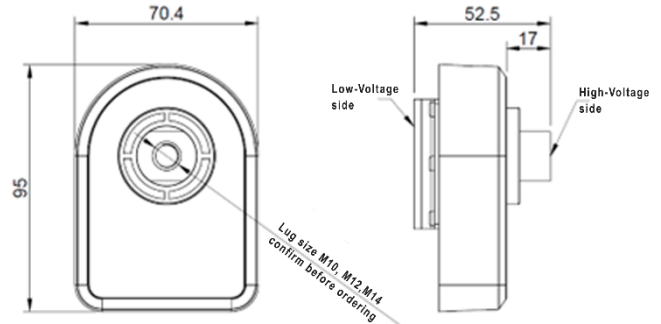
PTSPS105 sensor is applicable to various electric equipment with zinc oxide arrester, including transformer, electric transmission line, switch cabinet, power metering box and vacuum switch, etc

Features

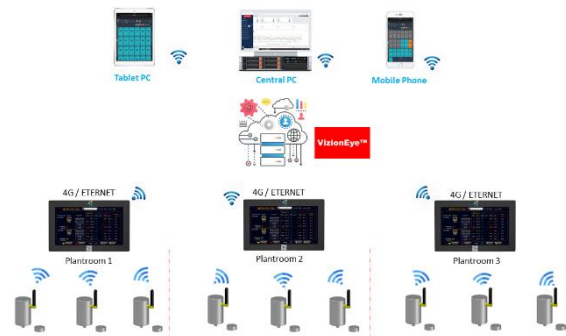
- Wireless data transmission
- No messy wiring
- No external power
- High-precision perception of acquisition
- Passive and maintenance free

- Powered using arrester leakage current
- Fast + easy installation
- No require for human intervention & inspection
- Equipotential safety perception

Dimensions (Unit: mm, tolerance: ±1%)



The System Architecture



Specification

| | |
|-----------------------|--|
| Power supply mode | Arrester leakage current, AC10kV |
| Energy Harvesting | <7μA, |
| Measurement scope | 70uA ~ 5mA leakage current |
| Measurement accuracy | ±50uA when leakage current ≤1mA; ≤ ±5% when leakage current > 1mA |
| Measurement interval | 60 seconds |
| Transmission interval | 180 seconds |
| Speed scope | Real-time monitoring |
| Working Frequency | 433MHz or 2.4GHz |
| Transmission power | 10dBm |
| Transmission distance | ≤250m (open area) |
| Protection level (IP) | IP68 |
| Flame retardant grade | V0 (700°C 30 Sec) |
| Service life | 10 years |

Miscellaneous

| | |
|-----------------------------|---|
| Cable sensor host dimension | 39 x 85 mm (cylinder diameter x height) |
| Weight | 281.19gram |
| Operation Temperature | -40°C ~ 85°C |
| Relative Humidity (RH) | ≤95%RH (non-condensing) |
| Storage Temperature | -10°C ~ 75°C |
| Mounting method | Bolt (M10, M12, M14) |
| Certification | CE – EN 61000-6-2:2005+AC; 2014/35/EU LOW VOLTAGE DIRECTIVE; 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 |
|-------------|----------------------------------|
| PTSPS105 | PTSenR Passive Wireless Aresstor |

