PTPDMS8U Portable PD Detection and Positioning Instrument

Product Overview

The PTSenR™ PTPDMS8U Portable PD Detection and Positioning Instrument is a compact, lightweight, and user-friendly portable instrument designed for partial discharge (PD) detection and positioning in high-voltage equipment. Using ultra-high frequency (UHF) detection technology, it captures and analyzes PD signals within insulation systems, enabling accurate assessment of insulation health. With its advanced diagnostic capabilities, the PTPDMS8U ensures safe, stable, and reliable operation of critical assets such as GIS, transformers, and switchgear, while extending equipment service life.

Key Characteristics

- **UHF Detection Method:** Provides precise evaluation of insulation status, preventing sudden failures and enhancing operational safety.
- **Automatic PD Type Identification:** Achieves an accuracy rate of over 85%, reducing reliance on manual interpretation.
- **Integrated Detection & Positioning:** Combines live PD detection with time-difference positioning, enabling rapid localization of insulation defects.
- **High Sensitivity & Fast Response:** Supports local amplification of UHF signals with high detection sensitivity and fast refresh speed.
- **Advanced Feature Mapping:** Equipped with UHF PRPS and PRPD maps for detailed discharge pattern analysis.
- **Robust Anti-Interference Capability:** Utilizes hardware and digital filtering to effectively suppress external noise and ensure reliable measurements.

PTPDMS8U

Applications

Gas-Insulated Switchgear (GIS)

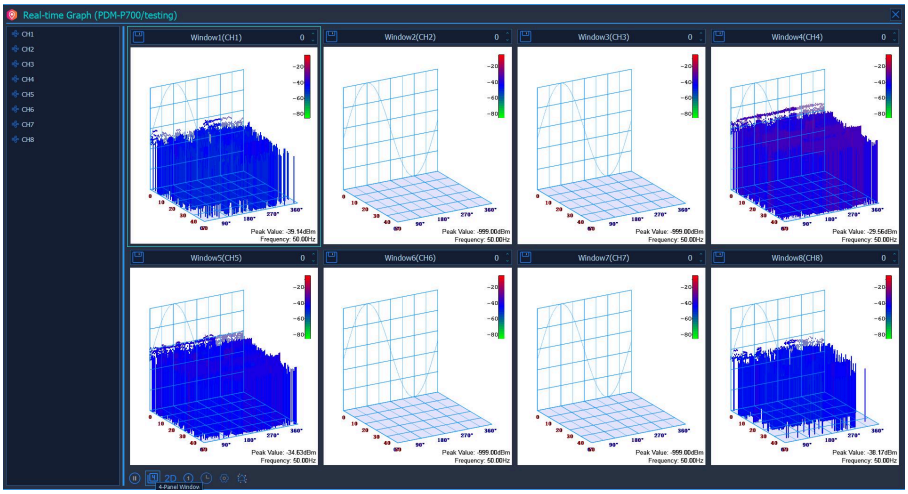
Gas-Insulated Line (GIL)

Power Cables

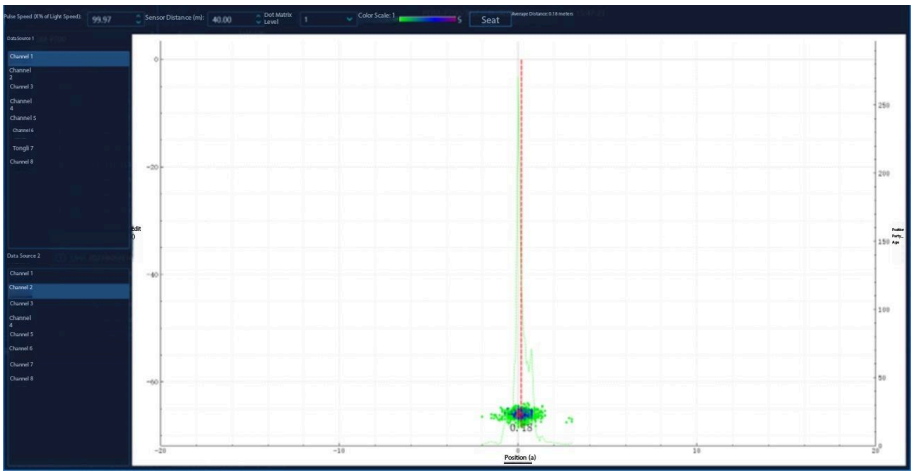
VizionEye AI Diagnostic Software Suite

VizionEye™ windows-based software enables full configuration of instrumentation, automated data downloads, historical analysis, and visual insight tools. Designed for switchgear, cables, and transformers, it supports intuitive PD signal interpretation and real-time fault classification making it a versatile solution for continuous insulation health management.

- The PTPDMS8U can acquire PRPS and PRPD profiles of each channel in real time.



- The PTPDMS8U is capable of automatic positioning of partial discharge signals with centimeter-level positioning accuracy.



Specifications

Operating Power Supply	220 V AC, Battery (8 Hours)
Operating Temperature	-20 ~ +55 °C
Number of Channels	8 Channels
Sensor	UHF Sensor
UHF Bands	300 ~ 1500 Mhz
UHF Dynamic Range	-80 ~ -20 Dbm
UHF Sensor Equivalent Height	≥12
Measurement Time Accuracy	1 ns
Power Frequency Synchronous Input	Wireless Synchronization, Power Synchronization, Internal Synchronization, External Synchro...
Service Life	Greater Than 5 Years

Ordering Information

Part Number	Product Description
PTPDMS8U	PTSenR™ Portable PD Detection and Positioning Instrument