PDSimply Portable

Portable Partial Discharge Monitoring System

Outstanding Features

- Portable continuous on-line monitoring
- Simple and easy field implementation
- Highly compatible with various sensors
- Lightweight and rugged design

About PDS

Power Diagnostic Service Co. (PDS) has been providing state of the art instruments and services for the diagnostics of partial discharge (PD) activities in high voltage electrical apparatus since 2004. To date, over 13,000 electrical apparatus are monitored continuously on-line.

Included Sensors

UHF TEM Type

Antenna type, suitable for HV/MV switchgear panels

UHF TM Type

Suitable for most applications with cable terminations and cable joints

NOTE: PDSimply Portable comes furnished with the above two sensors and is compatible with all PDS sensors.

PDSimply Portable is a partial discharge monitoring system for on-line monitoring of most EHV/HV/MV electrical apparatus. It is the portable model of our highly successful PDSimply monitoring system and is designed for use in premises where a permanent monitoring system is not required. PDSimply Portable complies with the IEC 62478 and IEEE 400.3 standards. Data from this portable unit can be conveniently accessed from a local laptop PC or remotely via its web-based interface.

PD Monitoring

The PDS on-line monitoring system features ultra-wide frequency bandwidth, noise filtering technology and the advanced algorithm, making it a simple and effective monitoring tool. In addition, the high performance design provides a one-minute resolution trend to observe the detail of PD movement.

Along with all other fundamental data, such as PD magnitude, pulse-per-second (pps) counts and PRPD pattern (dynamic mode), all signals can be easily analyzed.

Applications

PDSimply Portable is ideal for temporary monitoring of various assets such as transformers, GIS, cable joints, cable terminations, generators, switchgear, and other related HV components. This portable unit is housed in a rugged case and weighs only 4.4 kg (9.7 lb), making it the perfect tool for rough enviornments.

Operation Modes

PDSimply Portable can be operated as a standalone tool to gather PD data using its built-in storage or as a remote monitoring and analysis tool. In standalon mode, it can monitor local equipment and store data in its internal memory for up to 6 months of mointoring. In network mode, all acquired data can be uploaded to the cloud server for remote monitoring and alaysis for an unlimited time.

PD Trending

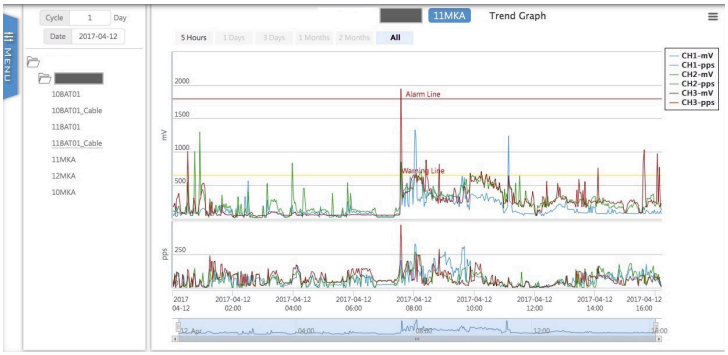
PDSimply Portable filters out the low frequency components of input signals below 50 Mhz, and the PD pulses are extracted from the remaining signal. The PD level is calculated by averaging the peak values of these pulses for trending information.

In addition, PDSimply Portable features a PDS signature Smart Algorithm that eliminates most false alarms that are a common issue for other monitoring systems. This greatly improves the PD monitoring experience.

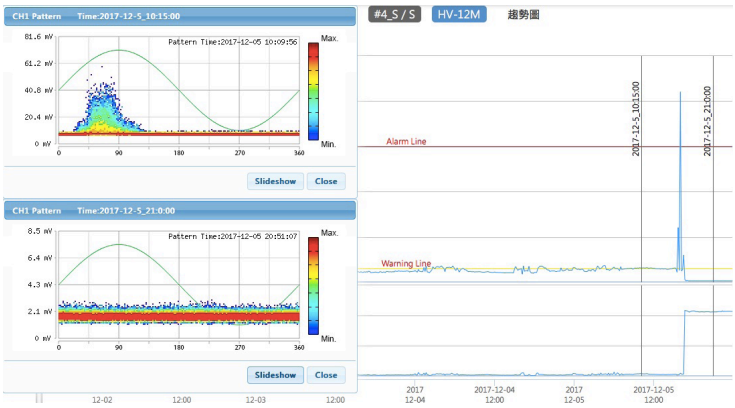
Software and Connectivity

PDSimply Portable an be easily connected to a laptop PC via its built-in WiFi interface. All fundamental data for PD measurement and monitoring, such as PD magnitude, pulse counts (pps), trending, and PRPD pattern can be stored and displayed locally and/or remotely.

The user can switch between different channels for observation and cross-comparison to determine the fault point. The Dynamic PRPD view can be used to better interpret PD change over time.



PDCare Monitoring Interface

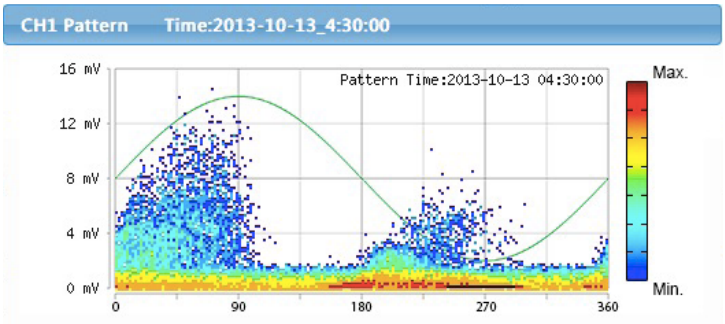


PRPD Pattern Comparison of Different Time Periods

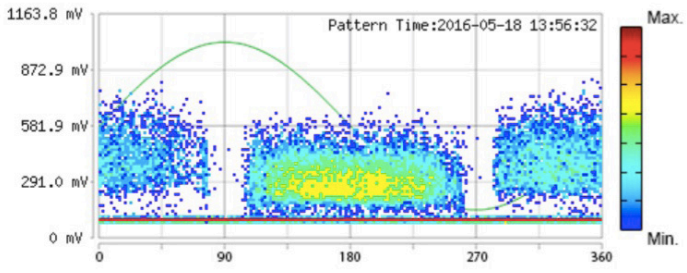
PDSimply Portable

Technical Specifications

Measurement Specs	
No. of Channels	6
PD Measuring Frequency	50 MHz - 900 MHz
PD Measuring Range	0.1 mV - 5 Vp-p
Resolution	10 bits bi-polar
Input Resistance	50 Ω
Filter	Built-in 50 MHz high-pass filter
Amplifier	90 dB Dynamic Amp, 6 dB/step
Hardware	
Storage	128 GB (256 GB optional)
Communication	WiFi
Power	AC 100 VRMS - 240 VRMS, 50/60 Hz, 15 W
Weight	4.4 kg (9.7 lb)
Function	
PD Trend	Yes
Pulse Count	Yes
PRPD Pattern	Yes
Dynamic PRPD Pattern	Yes
Date Selection	Yes
Adjustable Time Frame	Yes



PRPD Pattern: Internal Discharge



PRPD Pattern: Corona Discharge

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