PDSimply

Partial Discharge Monitoring System

GIS Window Sensor · Bushing Sensor · Switchgear Sensor: TEM

PDSimply · PDCARE · Remote Monitoring · Local Server · Local Monitoring

Cable Termination Sensor: TM · Tfr. Drain Valve Sensor · GIS Spacer Sensor
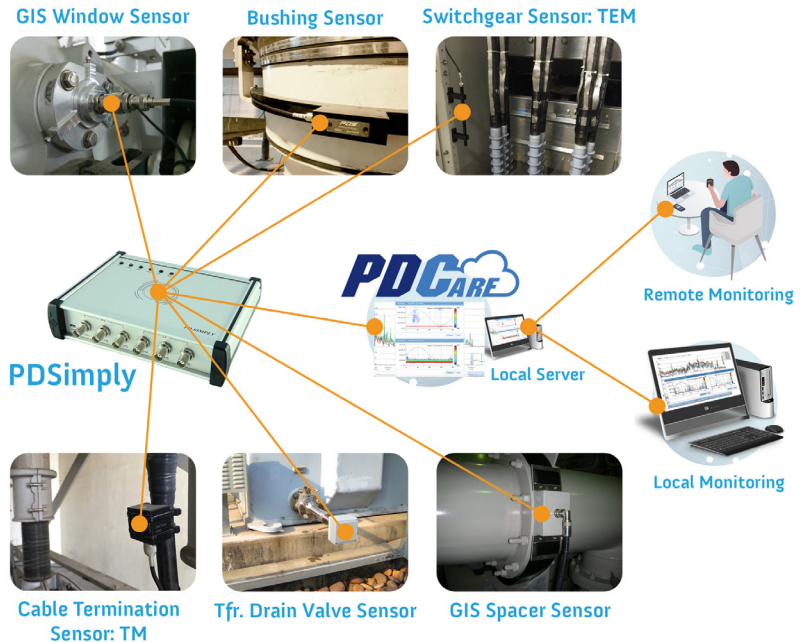
Outstanding Features

- 24 x 7 continuous on-line monitoring
- Simple and easy field installation
- User configurable trigger and remote alert
- User defined output contacts for remote SCADA communication
- One-minute resolution PD trending
- Wide frequency bandwidth, capable of monitoring different applications with one device

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.

PDSimply is an economical partial discharge monitoring system for continuous on-line monitoring of most HV/MV electrical apparatus. PDSimply continuously acquires and processes data from compatible PD sensors for PD diagnostics. Data from PDSimply can be accessed from a local PC or remotely via WAN. PDSimply uses state of the art UHF (Ultra High Frequency) PD detection technology that provides high signal to noise ratio enabling users to analyze the data (PD patterns) easily and identify the presence of partial discharge.

Simplifying On-Line PD Measurement

PDSimply is easy to install and configure and does not require a computer. Its wide measurement frequency bandwidth and high signal to noise ratio makes it easy to detect PD's.

Applications

PDSimply can be deployed in standalone mode to monitor local equipment or can be used in network mode to monitor a group of equipment from different locations. It features potential-free dry contacts that can be used with any kind of SCADA system.
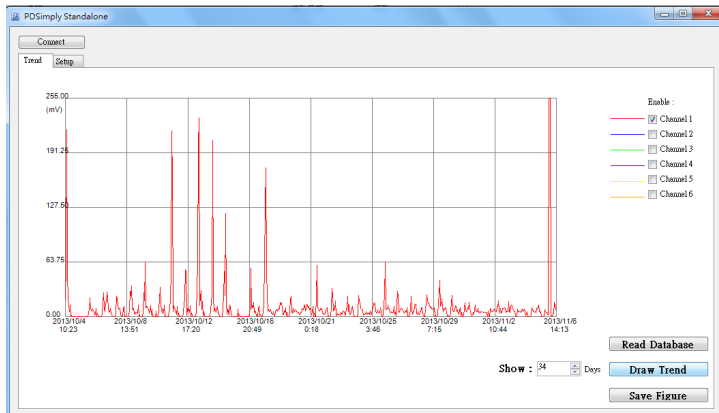
PD Trending

PDSimply 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 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.
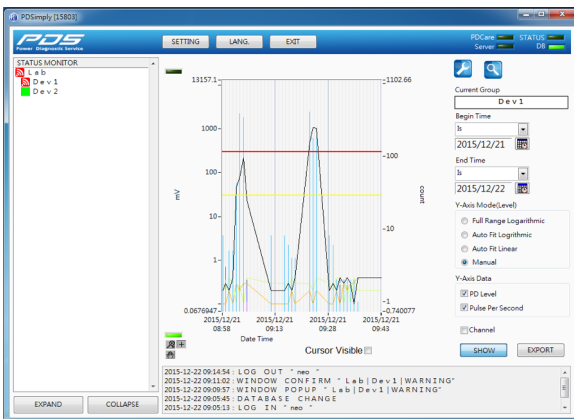
PDMS Software

PDSimply comes furnished with PDMS-Standalone and PDMS-Local software for standalone mode and local monitor mode operation, respectively. Both can be configured for up to 6 channels, can acquire and process data from PDMS to plot PD trend and other fundamental information for monitoring.
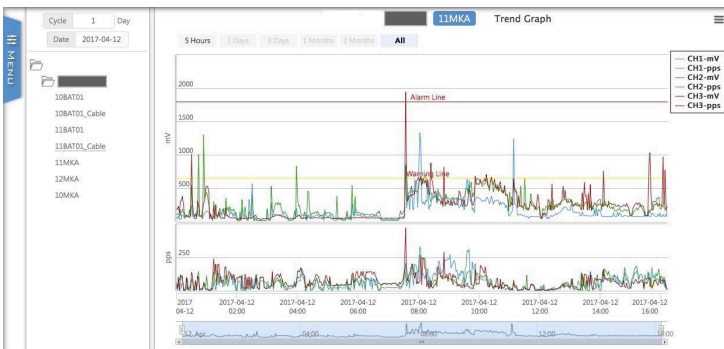
The software can show when the PD occurs, the PD magnitude, and the PD pulse number. It can be used to configure the PDMS settings, including PD alarm thresholds and alarm durations. The system can further integrate with PDCare, a remote monitoring service from PDS, for more advanced functions such as a real-time web-based interface, instant PD notification, quick event report, risk assessment and more. No PC is required for PDMS-Standalone mode, and the minimum PC system requirement for PDMS-Local is Microsoft® Windows 7 or later.

PDSimply Standalone Mode

PDSimply Local Monitoring Mode

PDCare Remote Monitoring Service

PDSimply
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	512 MB
Communication	micro USB, USB, RJ45
Output	5 x Dry Contacts
Power	AC 85 V - 264 V, 50/60 Hz, 15 W
Dimensions (mm)	250 x 164 x 53
Function	
PD Magnitude	Yes
PD Trend	Yes
Pulse-Per-Second (pps)	Yes
PRPD Pattern	Yes
Two-stage Adjustable Threshold	Yes, PDS Smart Algorithm
System Overview	Yes