

XDP-II™

Expert Partial Discharge Detector

The XDP-II™ design allows for convenient online measurement and detection of partial discharge activity in MV and HV insulating materials targeting applications such as power cable accessories, metal clad switchgear, power transformers, insulators, arresters, cable terminations and switches. When combining with our pico coulombs calibrator and PD coupler, the XDP-II™ now becomes an offline PD test system where pC measurements are made and saved to file.

Highlights

- Online & Offline PD Detection and Analysis
- Relative dB & pC measurements
- Multi-Sensor Capabilities
- Advanced Noise Rejection
- Phase Related Partial Discharge (PRPD)
- Comprehensive Analysis Software
- Minimal Training Requirement
- NiMH Batteries lasts All Day



Advanced & Innovative PD Detector

- XDP-II™ is perfectly suited for substation environment, field and laboratories applications
- 20+ years experience in the partial discharge detection and analysis field
- **Buy with confidence.** Training and support is included and provided by ndb Tech's skilled experts who performed thousands of successful XDP-II™ inspections



Free interactive presentation:



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sales@ndbtech.com



ndbtech.com

XDP-II™ - Technical Specs

Dynamic Range	60 dB
Data Storage	Over 380 recordings
Accuracy	± 1 dB
Resolution	1 dB
Bandwidth	300 kHz to 70 MHz
Operating Phase Signal Range (50 to 60Hz)	50 to 700mVrms
Sensitivity	5pC, depending on DUT capacitance
Clock	Real-time internal clock
Auto shutdown	After 30 minutes of inactivity
Operating Temperature	-20 to 50°C (-4 to 122°F)
Storage Temperature	-20 to 50°C (-4 to 122°F)
Charging Temperature	0 to 50°C (32 to 122°F)
Humidity	0 to 95% non-condensing
Liquid Protection	Splash proof
Display	High contrast backlit LCD screen
Autonomy	7.5 hours
Batteries	NiMH, rechargeable
Charging	3 hours
Dimensions / Weight	203 x 114 x 51 mm / 860g

PD Analysis Software

Trending evolution surveys plays an important role in a preventive maintenance plan. XDP-SOFT™ is a PC database software specifically designed to help classify, visualize and analyze PD recordings taken with the XDP-II™.



Online PD Sensors

Online partial discharge detection represents a great challenge whether it be because of ambient noise or other interferences. XDP-II's sensors were designed with those constraints in mind. With years of development work, we've built a great variety of solutions allowing for successful PD measurements in any environment.

Metal clad cabinets are fully covered with our new high frequency CT sensor on ground returns, spatula sensor on cable terminations/splice, directly on the exterior panels with the help of our TEV and contact acoustic sensors. Our exclusive XDP-304 bi-phase sensor kit is the perfect tool for VPIS (VIS) equipped switchgears where direct synched measurements are taken with maximal noise reduction. **Corona effect** detection is easier than ever with the help our pinpointing airborne acoustic parabolic sensor that includes a sight and laser pointer. For any online application, our wireless phase synchronizer module allows for **phase related partial discharge (PRPD)** detection and recording to enhance your diagnostic tasks.

Partial Discharge Phenomenon

Partial Discharge (PD) is an electrical discharge that occurs across a localized area of the insulation between two conducting electrodes, without completely bridging the gap. It is mostly found on aging insulation materials of high voltage electrical apparatus. This undesirable phenomenon translates into raised exploitation costs and questionable reliability, while economic performance and reliability are key criteria in the evaluation of an electricity supplier.

The XDP-II™ Solution

The well-established XDP-II™ is a battery-operated handheld device allowing for easy partial discharge detection and analysis. Its array of sensors covers an impressive number of applications such as cable joints & elbows, metal clad switchgear, overhead asset, transformer, and so on. Simply press its power button, connect a sensor, select the operating mode and voilà, the XDP-II™ is ready to roll. The measured PD activity is shown on its display where synched patterns are determined. A downscaled audio signal is played from its built in speaker for the operator to discriminate real PD from ambient noise. Want to conduct field surveys? Measurements are quickly saved into memory with the press of a button. They are then transferred to a PC for further classification and analysis. With years of development and research work in the partial discharge field, ndb Technologies has perfected the art of manufacturing reliable and easy to use instruments and the XDP-II™ is no exception.



Offline PD Testing

Not only can the XDP-II™ perform online PD detection, it also offers a cost-effective, portable and precise offline PD tester solution where pC measurements are taken with voltages up to 50kV or 100kV.



XDP-II-017™
Wireless phase synchronizer module



XDP-304™
Switchgear VIS bi-phase coupler sensor



HFCT-HD™
High Frequency Current Transformer sensor



ULD-401™
ULD-II-406™
Ultrasonic acoustic sensors (airborne & contact)



XDP-II-004™
Capacitive spatula sensor for cable splice & elbows



XDP-II-016™
TEV sensor for metal clad cabinet