



**ndb Technologie inc.**  
 111-1405, St-Jean-Baptiste  
 Québec (Qc)  
 Canada G2E 5K2  
 Tél : (418) 877-7701  
 Fax : (418) 877-7787  
 E-mail : [mkt@ndb.qc.ca](mailto:mkt@ndb.qc.ca)  
 Web : [www.ndbtech.com](http://www.ndbtech.com)



## XDP II

### Portable PD recorder and diagnostic system

The XDP II is a portable device for, online, factory and laboratory partial discharge measurement on electrical apparatus, or components. The XDP II can be used in accordance to IEC 60270. It records partial discharge measurements for computer analysis and diagnostic using the optional XDP II software for a PC. Using the appropriate accessories, the XDP II can be used in several applications.

### Applications

- Quality control of MV/HV equipment on production line (transformers, switchgears, etc.)
- Quality control of the insulators during installation or underground network repair (cable joints, elbows, etc.)
- Online follow-up of the ageing process of the critical components' insulation (transformers, switchgears, cable joints etc.)
- Safety control prior to work conducted under charge

Partial discharge testing is a PREDICTIVE qualitative analysis tool that can warn of a potential upcoming system failure. The XDP II is a powerful and flexible Partial Discharge Measurement System. The XDP II is an ultra-wide-band amplification system allowing to measure PD activity. It uses a very high speed detection technique to detect PD activities.



Pico Coulomb display mode

The XDP II displays graphically PD wave form and the built-in speaker allows to listen PD activities. Those information can be recorded in the XDP II along with date and time of the reading. The recorded measurements remain stored in memory even when the XDP II is shut off. This allows the transfer of these recordings to a computer upon return from the worksite.

### Advantages of the XDP II

- Portable battery operated
- Ease to use
- pC and dB value display
- Several display modes for on-site real time analysis and diagnostic
- Keeps the wave form and edge of PD in memory, with the date and the hour
- Transfers the collected data stored in a computer to ensure the follow-up of the measurements
- Network synchronization for random noise reduction
- Differential technique for noise reduction
- Water-proof and rugged for work on site applications

### Operation

#### Factory and laboratory diagnostic:

- The XDP II when used with a low noise HV source, HF capacitive coupler and other accessories provide you with a cost effective and powerful PD test system for your MV/HV network components such as transformers, switchgears, arresters, etc.

#### Energized diagnostic:

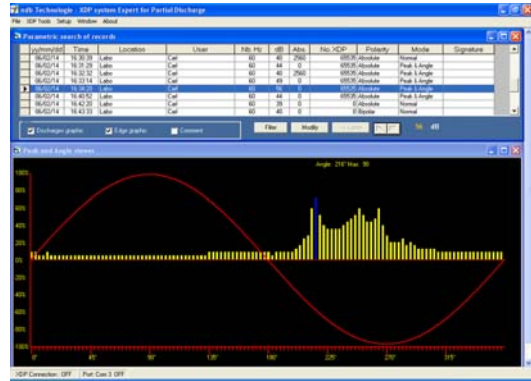
- Capacitive spatula or inductive sensors used with the XDP II allow PD diagnostics and analysis on cable accessories (joints, elbows, T elbows, terminations, etc.). Those sensors detect the electric or magnetic field generated by PD.
- Bi-phase coupler used with the XDP II on switchgears uses the capacitive voltage dividers of the VPIS to detect internal high frequencies of by PD.



Peak Average Phase Angle mode

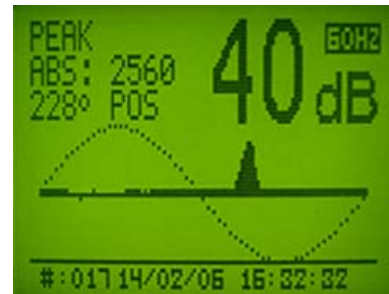
**Technical Specifications**

- Simultaneous display in dB and pC
- Peak Average Angle Display
- Calibration Mode in pC
- Graphical PD wave form Display
- Network synchronization capability
- Peak detection with a fast numeric circuit (CPLD)
- Fast numeric processor (DSP) for instant analysis of results
- LCD (Liquid Crystal Display) displays results in easy- to- read, big letter casings and graphic (wave form)
- PC(Windows)-interface for analysis and follow-up of results
- Built-in calibration generator



Optional XDP II database and viewing Software

Sensibility	5pC
Dynamic Range	0-60 dB Total
Sampling Frequency	30 MHz or 33 ns
Maximum number of recordings	365 recordings
Bandwidth	300 kHz to 70 MHz
Date	Real-time internal clock (Year, month, day, H, Min., Sec.)
Network Synchronization	1 mA to 50 mA 50/60
Calibration	Built-in PC signal generator for set up calibration
Operating Temperatures	-4°F to +122°F (-20°C to + 50°C)
Autonomy	8 hours
Batteries	Six (6) 1,2V 2,1Ah rechargeable "A" NiMh batteries
Charger	12V 1A adapter with a water proof connectors, available for 110V or 220V
Charging Time	3h max.
Display Modes	dB and PD wave form Calibrated pC absolute value Peak Average Phase Angle High speed edge display Analysis signature
Dimensions	203,3 X 114,3 X 50,8 mm (8 X 4,5 X 2 po.)
Weight	0,86 kg (1,9 lbs)



Peak average angle

**Optional Accessories**

- |                                |                        |
|--------------------------------|------------------------|
| - Capacitive Spatula (sensor)  | - Differential Spatula |
| - Inductive sensor             | - Coupling Capacitors  |
| - pC reference modules         | - Bi-phase coupler     |
| - LP filters                   | - Reference modules    |
| - PD free source up to 45 Kv   | - XDP II Software      |
| - Nylon padded protection case | - Transportation case  |



Calibrated pC reading