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## PDS (Partial discharge scanner)

### INSULATION FAULT LOCATOR (Medium Voltage)

The PDS is used to detect and locate partial discharges on medium voltage insulated joints, to monitor their condition while in service or to test for quality, just after installation.

#### Insulation fault detection

Insulation faults are an important factor in degradation and reduction of life-time of an electrical joint. This translates by raised exploitation costs and questioned reliability, while economic performance and reliability are key criterions in the evaluation of an electricity supplier. It is then important that an electric utility has a wide spread, quick and efficient tool to check for quality and health of its electrical network.

The market's demands over electric utilities necessarily transfer to their subcontractors, who must comply with higher quality requirements regarding their work. As the electric utility for which he works, the subcontractor that has tools allowing him to monitor and to certify the quality of his job will become an attractive and reliable choice.

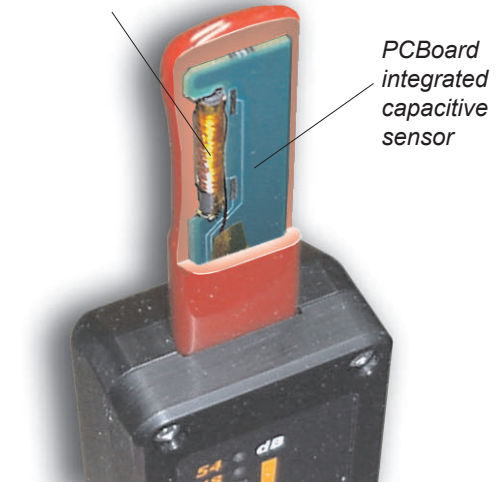
#### «O.K., but is the PDS for me?»

Whether if you are from an electric company or a subcontracting firm, the question remains simple: Are we reliable, thus competitive? The PDS answers this question, short and simple. No conversions, no interpretation: only the answer to the question you are the most concerned with, free of all the useless data.

#### Intensity level

The PDS indicates the intensity of the partial discharges, converting the electrical charge units (pC) into decibels (dB). So the reading is kept as a simple intensity level indication, proportionnal to the probability of a fault's presence in the tested joint.

#### Inductive sensor



PCBoard  
integrated  
capacitive  
sensor

Close-up of the PDS sensor

*This insulated and waterproof capacitive probe catches the electric field sharp variations that characterizes partial discharges. It integrates both capacitive and inductive sensors, to allow partial discharges detection in virtually any cable configuration.*

#### Visual and audio indicators

The visual indicator is a bargraph with eight steps, each step corresponding to twice the intensity (6dB) of the previous level, for a total range from 6dB to 48dB. An audio indicator which frequency is proportionnal to the displayed intensity allows the user to locate any fault even if the handling conditions don't allow him to see the display.

#### Easy handling

*Easy to use, the PDS can be handheld or mounted on a two-parts hotstick provided with each unit.*





### **Compact and practical tool**

Small to ease access to all types of installations, the PDS can be handheld or manipulated with a hotstick depending on the situation. Obviously, it belongs to your toolkit, along with strippers and insulated tools, as part of everyday work.

### **Specifications**

- Solid and waterproof enclosure, CNC made in Delrin™ .
- Small dimensions straight captor (2" x 1" x 1/8"), for precise pinpointing of partial discharges and an easy access over constrict installations.
- The sensor is insulated by a Plastics sleeve, which is also abrasion-resistant.
- High frequency detection (100 MHz and more)
- Audio indication corresponding to the level displayed
- Intensity range: 0-48 dB
- Sensibility: from 100 to 25 000 pC
- Autonomy: 30 hours of use
- Batteries: 4 AA size Alkaline batteries
- Dual mode sensor, combining capacitive and inductive principles

### **Accessories**

- Insulated manipulation stick in two parts (length: 13 inches each)
- Nylon protective bag
- Universal coupler for hotsticks



**IMPORTANT:  
NOT FOR USE ON  
UNINSULATED,  
MEDIUM OR HIGH VOLTAGE  
EQUIPMENT**