



## PD Surveyor Air

**Handheld PD Surveying tool  
for MV cable and plants**

### Benefits

- ▶ **Three PD sensor technologies in one device**
- ▶ **Early detection of PD activity**
- ▶ **Universal application - can be applied to MV cables, MV switchgear & other types of MV plants**
- ▶ **Directs maintenance resources straight to the problem areas**
- ▶ **Easy to use**

### Description

The PD Surveyor Air™ handheld PD surveying tool is the “first-line of defence” for the detection of PD activity in medium voltage (MV) power cables and plants in the voltage range from 6.6 kV to 45 kV. The robust test unit, incorporated with a digital TEV dB display and external acoustic probes, enables the user to carry out rapid, “look-see” insulation condition testing through the unique combination of three PD measurement technologies: HFCT, TEV and Airborne Acoustic.

The PD Surveyor Air™ handheld test unit meets the requirements of both utility and industrial MV plant owners for a simple, portable, and easy-to-use hand-held PD screening device that can be used by all operational staff in the substation. It is suitable for rapid PD ‘screening’ of MV metal-clad switchgear, power cables, and other type of plants.

The PD Surveyor Air™ is recommended as a PD pre-screening tool for the 100% monitoring of the network. It is useful as a precursor for more in-depth diagnostic testing, which is only carried out if and when required (i.e. PD is detected by the PD Surveyor Air unit). A more in-depth diagnostic test could be for instance Online Monitoring with the sebaKMT LPD Monitor or Offline PD Diagnosis.

Optional accessories are available to improve both the flexibility and detection range of the PD Surveyor Air™ unit. With help from the optional available out-door acoustic parabolic receiver (incl. laser pointer) it is possible to detect and locate surface and corona discharges on insulators or outdoor terminations.

### Scope of delivery

- ▶ PD Surveyor Air
- ▶ HFCT 100/50 sensor and 100 kHz filter
- ▶ Standard headphones
- ▶ Battery charger/ Connection cables
- ▶ Soft carry case
- ▶ Operating manual



### Technical Data

Measurement range	HFCT 300 ... 30000 pC TEV 15 ... 50 dB AA 8 ... 30 dB
Power supply	Built-in battery, Li-ion
Battery charger	V <sub>in</sub> 90 ... 264 V AC 50/60 Hz V <sub>out</sub> 8,4 V DC
Operating temperature	-10 °C ... + 55 °C
Storage temperature	-20 °C ... + 60 °C
Dimensions (WxHxD)	120 x 220 x 110 mm
Protection class	IP 30
Weight	1.26 kg

### Features

- ▶ Handheld, pre-screening tool, suitable for on-line detection of PD activity in MV cables and plants
- ▶ Three PD sensor technologies combined in one device: acoustic (AA), capacitive (TEV) and inductive (HFCT)
- ▶ PD-measurements on MV-Cable with HFCT sensor
- ▶ PD-measurements in metal-clad switchgear/ plant with acoustic sensor and accurate digital TEV-dB measurements
- ▶ Lightweight and portable device with an easy-to-understand, 7-level, colour-coded PD display.
- ▶ Test time per cable/plant item 10 ... 30 sec.

### Options

- ▶ Indoor acoustic probe
- ▶ Outdoor acoustic parabolic receiver
- ▶ Peltor PPE headphones (hard hat suitable)
- ▶ Accessories carry case



**Online PD measurement on MV cable with the HFCT sensor.**



**Outdoor insulation testing with the optional acoustic parabolic receiver.**