

# PD-Alarm

<b>Avoid power outages</b>	early warning about defects that can lead to failure
<b>Safety first</b>	ensure the substation is clear of PD before conducting work
<b>Failure prevention</b>	implement as part of a Condition Based Maintenance program

The PD-Alarm is an asset mounted device for indicating the presence of partial discharge in high voltage switchgear, ring main units (RMUs) and transformers. Designed for use in small substations, the instrument can activate local and remote alarms in addition to local indication.

The PD-Alarm is built into a tough case that magnetically mounts to the RMU. Installation is very quick and simple with only a power connection required to get the system operational.

Alarms can be configured to operate either locally with SCADA or remotely using an optional integrated modem.

The system incorporates algorithms that distinguish noise from real PD, significantly reducing the likelihood of getting false alarms. The status and PD levels are displayed on a bright OLED display at the front of the unit.



*Simple and cost effective alarm system for PD*

## THE BENEFITS

- Display** – Ultrasonic and TEV level displayed in dB
- Alarms** – Current ‘live’ alarms and historical alarms
- TEV** – Measurement of electrical transients generated by internal PD
- Ultrasonic detection** – 3 independent ultrasonic channels detecting surface PD
- Integrated Noise Detection** – Algorithm helps avoid ‘False Alarms’
- Simple to install** – No wiring required between PD detector and central hub

# Detailed Specification

## 1. TEV Measurements

- Sensor Capacitive
- Measurement Range 0 to 80 dBmV
- Resolution 1 dB

## • Ultrasonic Measurements

- No of channels 3
- Measurement Range -6dBuV to + 70dBμV
- Resolution 1 dB
- Transducer Sensitivity -65dB (0dB = 1volt/μbar RMS SPL)
- Transducer frequency 40 kHz

## • Alarms

- Remote alarms SMS & Email
- Local alarms SCADA interface
- Local indication Colour coded LEDs & OLED display

## • Hardware

- Enclosure Robust ABS case
- Screen OLED
- Control Membrane keypad
- Connectors Power, SCADA, External Acoustic Sensor

## • Environmental

- Operating Temp -5°C to 55°C
- Humidity 0 to 90% RH non-condensing
- IP Rating 54

## • Dimensions

- Size 230 x 195 x 65
- Weight 660g

## • Power

- Rated Voltage 90 to 264 V AC
- Frequency 47 to 63Hz