

## PDS 62-SIN

### Portable PD detection and localization system



- Partial discharge diagnostics with VLF sinusoidal voltage up to 62kVpeak
- With 14.5 kg – the lightest PD measuring unit on the market
- Real-time data evaluation and display of results, no post processing needed
- General and localized Phase Resolved PD pattern (PRPD) display for defect type recognition

#### DESCRIPTION:

Network operators can now get faster and significantly more reliable information about the quality and the condition of their cables. This thanks to the brand-new PDS 62-SIN PD detector. For the first time, it has become possible to immediately locate faults in underground cables during the actual PD measurement. The PDS 62-SIN has been designed for all Megger VLF Sinusoidal testers up to 62kVpeak.

Based on many years of field experience, customer demands and unique innovations, the PDS 62-SIN has been developed. This has been reflected in the PD detector software, it has never been easier to perform PD measurements; starting with real-time data analysis and display of results during the actual measurement, ending with the highest flexibility in creating customized reports.

Furthermore the PD detector software will support the user with the data evaluation by means of so called Phase Resolved Partial Discharge (PRPD) patterns. With help from these PRPD patterns the user is able to distinct between different types of PD defects, such as corona or internal PD. This is of major importance for partial discharges located at terminations; corona discharges are not problematic, whereas internal PD would.

With its weight of 14.5 kg only the PDS 62-SIN is the lightest PD measuring unit on the market. The PDS 62-SIN comes with all accessories needed to perform PD measurements, like the in-house and certified PD calibrator, Laptop and connection cables.

#### FEATURES

- High coupling capacity of 25nF
- Low weight of 14.5 kg only
- PD measurement acc. to IEC 60270
- Automatic bandwidth adaption
- Fully automatic calibration
- Real-time data evaluation and display of results
- General and localized PRPD display
- Monitored withstand testing
- Reporting per mouse-click

## TECHNICAL DATA\*

### PDS 62-SIN

#### Voltage

|                                   |                                |
|-----------------------------------|--------------------------------|
| Operating                         | max. 62kV <sub>peak</sub>      |
| Type                              | VLF sine wave (0.01Hz - 0.1Hz) |
| Capacity of HV coupling capacitor | 25nF                           |
| Sensitivity range                 | 2 pC ... >100 nC               |
| PD self-noise level               | < 2 pC                         |
| PD impulse repetition range       | 100 kHz                        |

#### PD localization

|                          |                                |
|--------------------------|--------------------------------|
| Measuring range          | 0 ... 16,000 m   v/2 = 80 m/μs |
| Propagation velocity v/2 | 50 ... 120 m/μs                |
| Sampling rate            | 125 MHz (8 ns)                 |
| Bandwidth                | 3 / 20 MHz (switchable)        |
| Accuracy                 | 1% of the cable length         |
| Resolution               | ± 1 pC / ± 1 m                 |

|              |                                |
|--------------|--------------------------------|
| Filtering    | attachable HF filter (max. 1A) |
| Power supply | Via supplied power supply      |

|                        |                               |
|------------------------|-------------------------------|
| Weight                 | 14,5 kg                       |
| Dimensions (W x D x H) | 36 x 33 x 64 cm               |
| Temperature Operation  | -20 °C ... 55 °C              |
| Storage                | -40 °C ... 70 °C              |
| Relative humidity      | 93% at 30 °C (non-condensing) |

### PD calibrator

|                        |   |
|------------------------|---|
| Pulse level            | 100pC, 200pC, 500pC, 1nC, 2nC, 5nC, 10nC, 20nC, 50nC, 100nC |
| Pulse frequency        | 50 Hz, 60 Hz, 100 Hz or via Light triggered sensor          |
| Power supply           | 9-volt block battery  |
| Weight                 | 410 gr  |
| Dimensions (W x D x H) | 195 x 85 x 35 mm  |
| Temperature Operating  | -10 °C ... 50 °C  |
| Storage                | -30 °C ... 70 °C  |

## SCOPE OF DELIVERY

- PDS 62-SIN PD coupler
- PDS 62-SIN accessoires in bag
- PD calibrator
- Laptop
- SW license incl. 3 hardware keys

## ORDERING INFORMATION

| Product   | Order no. |
|---|-----------|
| <b>PDS 62-SIN set consisting of:</b>  |           |
| PDS 62-SIN PD coupler   | 1009781   |
| PD calibrator 100 pC till 100 nC  | 2008807   |
| PD software license incl. 3 dongles   | 90011937  |
| <b>Mandatory selection lead set (1x)</b>  |           |
| Lead set PDS 62-SIN "Standard"  | 2009829   |
| Lead set PDS 62-SIN "NAFTA"   | 2011559   |
| <b>Mandatory selection preinstalled Notebook (1x)</b>                                   |           |
| Notebook DE   | 2007127   |
| Notebook EN   | 2007129   |
| Other languages on request  |           |
| <b>Optional HV connection cables:</b>   |           |
| PDS 62 HV connection cable PD free 3m   | 2005655   |
| PDS 62 HV connection cable PD free 5m   | 890010915 |
| PDS 62 HV connection cable PD free 10m  | 890023555 |
| PDS 62 HV connection cable PD free 15m  | 890015603 |
| PDS 62 HV connection cable PD free 5m (NAFTA)   | 2012596   |
| PDS 62 HV connection cable PD free 10 m (NAFTA)   | 2012597   |
| PDS 62 HV connection cable PD free 15m (NAFTA)  | 2012598   |
| <b>Optional accessories:</b>  |           |
| Diagnostic connection set   | 890017909 |
| PD-free adapter TE PC-MC-UNI-L, long version (460 mm), incl. thread-adapter M16 to M12  | 1013564   |
| PD-free adapter TE PC-MC-UNI-K, short version (310 mm), incl. thread-adapter M16 to M12 | 1013563   |
| Transport case PDS 62-SIN   | 90023948  |

\* We reserve the right to make technical changes.

### SALES OFFICE

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### PDS62-SIN\_DS\_EN\_V03

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