

## PDS 62-SIN

# Portable PD detection and localization system



- Partial discharge diagnostics with VLF sinusoidal voltage up to 62kVpeak
- With 15 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 15 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 15 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

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### **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  $0 ... 16,000 \text{ m} \mid v/2 = 80 \text{ m/µs}$ 

 $\begin{array}{lll} \mbox{Propagation velocity v/2} & 50 \dots 120 \mbox{ m/µs} \\ \mbox{Sampling rate} & 125 \mbox{ MHz (8 ns)} \\ \mbox{Bandwidth} & 3 / 20 \mbox{ MHz (switchable)} \\ \mbox{Accuracy} & 1\% \mbox{ of the cable length} \\ \mbox{Resolution} & \pm 1 \mbox{ pC} \, / \pm 1 \mbox{ m} \end{array}$ 

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

90 ... 264 VAC, 50/60 Hz Weight 15 kg

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.
PDS 62-SIN set consisting of:	
PDS 62-SIN PD coupler	1014867
PD calibrator 100 pC till 100 nC	2008807
PD software license incl. 3 dongles	90011937
Mandatory selection lead set (1x)	
Lead set PDS 62-SIN "Standard"	2009829
Lead set PDS 62-SIN "NAFTA"	2011559
Mandatory selection preinstalled Notebook (1x)	
Notebook DE	2007127
Notebook EN	2007129
Other languages on request	
Optional HV connection cables:	
PDS 62 HV connection cable PD free + ground cable 3 m	2009832
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
Optional accessories:	
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

<sup>\*</sup>The information in this document is subject to change without notice and should not be construed as a commitment by Megger Germany. Megger Germany assumes no responsibility for any errors that may appear in this document.

## **SALES OFFICE**

Megger Germany GmbH Dr.-Herbert-lann-Str. 6 96148 Baunach, Germany T +49 9544 680 F +49 9544 2273 PDS62-SIN\_DS\_EN\_V04a

www.megger.com ISO 9001

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