

Advanced Test Equipment Corp.

Rentals • Sales • Calibration • Service

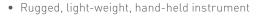
DOBLE IN-SERVICE TESTING & ASSESSMENT

PDS100

Partial Discharge Surveyor

CHECK IN-SERVICE SUBSTATION EQUIPMENT FOR SIGNS OF INTERNAL INSULATION DAMAGE The Doble PDS100 Partial Discharge Surveyor is an RFI surveying tool that is designed for use in a live substation. Without the need for outages, the PDS100 can detect partial discharge (PD) in just a few seconds, thus making it an ideal tool for a condition based maintenance program. Whole substations can be quickly surveyed and analyzed.





- Intended for PD survey when testing object(s) remains in service
- RFI detection technology principle based on capturing electromagnetic energy radiated from area of defect
- Multi-mode functionality for noise recognition, PD detection and classification
- Synchronization with power frequency via wireless module to facilitate Phase Resolved Partial Discharge (PRPD) pattern
- Internal data storage
- PDF Viewer software for data review and analysis
- Works with a variety of PD sensors, probes and antennae for various applications

BENEFITS

- Non-invasive, safe and effective method for PD detection
- Multiple applications
- Application as part of a regular inspection/survey or for targeted analyses
- Cost-effective way to include PD survey in condition based maintenance program (CBM)



PDS100 TECHNICAL SPECIFICATIONS

	POWER SUPPLY		
External supply	External DC adaptor, 12 V @ 2 A		
DC adapter	85 - 264 V AC (47 - 63 Hz)/ 12 V DC		
Internal battery	Li-lon, 7.2 V, 6.6 Ah		
Battery life	> 6 hours		
Charging Time	3 hours		
DETE	CTION AND SWEEP FUNCTIONS		
Detector modes	Peak, Average and Separate Peak and Average Mode (SPAM)		
Sweep modes	Continuous, Counted and Single Mode		
Synchronization	Synthesized phase or wireless synchronized to power frequency		
	FREQUENCY		
Measurement range	50 MHz - 1000 MHz		
Resolution Bandwidth (RBW)	120 kHz / 6 MHz		
	AMPLITUDE		
Display unit	X/Y-axis: ms - MHz / dBm or MHz / dBμV		
DA	TA STORAGE AND TRANSFER		
Internal	NV Flash Memory (SD)		
External	USB storage class compliant USB Flash Drive / Hard Disk Drive		
Data Transfer	USB A/B to and from computer		
File Format	XML for use with Doble PDViewer software		
Real Time Clock	Battery backed		
	CONNECTIVITY		
	USB 1.1 Host and Client		
	LCD SCREEN		
Display	TFT, 6.4: Transreflective		
Size	132 x 100 mm / 5.20 x 3.94 in (W x H)		
Resolution	640 x 480 pixels, 256 colors		
Backlight	LED		
	MECHANICAL		
Instrument	225 x 310 x 70 mm (WxHxD) 8.85 x 12.20 x 2.25 ins (WxHxD) Weight 2.4 kg / 5.5 lbs		
Transport Case	425 x 284 x 155 mm (WxHxD) 16.75 x 11.20 x 6.10 ins (WxHxD) Weight 3.4 kg / 7.5 lbs		
Total Weight	6.0 kg / 13.2 lbs incl. instrument, transport case, manuals, CD and charger		
	ENVIRONMENT		
Enclosure Transport Case	IP64 IP67		
Humidity	0 - 95% non-condensing		
Operating	-10°C to + 50°C / 14°F to 122°F		



Storage temperature

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-20°C to + 70°C / -4°F to 158°F

USER-FRIENDLY

The PDS100 is a rugged, light-weight and powerful high-tech instrument with a big display and large soft key buttons. The instrument is easy to use and the software enables the operator to record and analyze PD signals and make decisions for further actions.

TECHNOLOGY

The instrument searches for PD in the radio frequency area. Harmful PD will reveal itself by the electromagnetic energy emitted from the area where the activity is. The PDS100 captures the electromagnetic energy in the RF spectrum and displays a "footprint" of the RF interference from partial discharge causing the radiation.

ORDERING INFORMATION

PRODUCT	

PDS100

Complete with Case, Antenna, Adapter and PC software

OPTIONAL ACCESSORIES

HFCT

Scan for electrical pulses (f<200 MHz) as evidence of PD to earth. Can be clipped on an apparatus ground wire (transformers, dead tank breakers) and connected to a PDS200.

Directional Antenna

Provides more specific location of RFI sources. With this combination you not only determine the presence of PD sources, you can also establish the direction of the emissions.

UHF Drain Valve Probe DN50/DN80

Transient Earth Voltage (TEV) capacitive probe Find PD in metal-clad switchgear and GIS.

Synchronization

Sync kit available to allow for more accurate phase resolved PD patterns

Specifications are subject to change without notice. Doble is an ISO 9001 & ISO/IEC 17025 & 17034 Certified Company.

Doble is an ESCO Technologies Company. MKT_SL_PDS100_12/2020