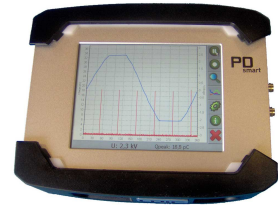


PD-Smart

Applications

Digital, highly advanced, multi-purpose and smart Partial Discharge and Diagnostics System for on-line and off-line PD testing on power apparatus and high voltage insulation systems, for both in-house and on-site applications.

- » according to the standard IEC 60270, VDE 0434, ANSI as well as various IEEE standards
- » PD quality tests on high voltage equipment
- » PD diagnosis on developing insulating materials
- » Designed for on-site PD diagnosis tests as well as for manufacturing and research
- » PD fault location for power cables



Benefits

- » single or multi-channel (scaleable)
- » truly parallel and synchronous measurement of phi-Q-N pattern
- » stand-alone / handheld mode or remote controlled via LAN and PC
- » small compact design for stationary or on site use
- » features the well known LDIC Analysis and Diagnostics software
- » expandable for various PD / RIV applications up to tan delta / Power Factor

Specifications

PD detection:

- » permanent detection of all PD events
- » digital, numeric real-time integration of PD events
- » integration in time and frequency range
 - » time range: 100 ns 10 μ s
 - » frequency range: center frequency: 0 Hz 20 MHz
 - » band width: 9 kHz, 30 kHz, 100 kHz, 300 kHz, 1 MHz, 3 MHz
- » charge evaluation full compatible to IEC 60270, VDE 0434, ANSI
- » single pulse detection: < 3 ns
- » max. double pulse resolution: <200ns (time range, superpositionerror < 1 %)
- » max. pulse frequency: 2 MHz
- » Input frequency range:
 - » Voltage: DC bis 10 kHz
 - » PD signal: DC bis 20 MHz
- » Input impedance:
 - » Voltage: 1 MOhm
 - » PD signal: 50 Ohm
- » Input voltage:
 - » Voltage: 60 V rms (max)
 - » PD signal: 10 V rms (max)
- » Dynamic range:

PD-Smart

- » Voltage: 24 bit, 80 dB
- » PD signal: 14 bit, 100 dB
- » PD input protection:
 - » input protection against over-voltage and short-circuit
- » PD input coupling:
 - » DC, AC, Bias-Tee (optional)
- » Additional options:
 - » Internal test generator, self-test of the signal way
- » Voltage supply:
 - » 7 - 20 V DC, power: appr. 8 W,
 - » external power supply with power pack (100 - 240 V, 50 - 60 Hz)
- » Control:
 - » local, remote
- » Displays:
 - » QVGA-Colour-Display, 4 Status-LED
- » Outputs:
 - » 1 x LWL-Output,
 - » 1 x Ethernet (10, 100, 1000 Mbit) - full-duplex
- » Inputs:
 - » 2 x BNC (HF PD signal, NF voltage signal),
 - » 1 x TTL signal for gating
- » Temperature range:
 - » 0 °C bis 55 °C (operation)
 - » 0 °C bis 70 °C (storage)
- » Humidity:
 - » 5 % bis 95 %, non-condense

Accessories

- » Fault Location modul for PD Location in power cables (Reflectometer method)
- » UHF-modul (Verstärkung: 0 dB / 26 dB / 38 dB, Bandbreite 110 MHz bis 1700 MHz)

- » Calibrator LDC-5 for external calibration of the PD measuring circuit in pC of apparent charge up to 500 pC
- » Charge Injector LDJ-5 for calibration of the PD measuring circuit with charge magnitudes up to 50000 pC
- » Measuring impedance LDM-5 or LDM-5/U, for signal and test voltage decoupling (bandwidth 20 MHz, maximum current 5 A, optional 50 A)
- » Docking station "Smart Dock"



LDIC ist zertifiziert nach
DIN EN ISO 9001:2000