

Specifications

Industry Partial Discharge Measuring System

Type PD-5

Detector

supplied with calibration certificate

PD ranges	10 - 100 - 1000 - 10'000 - 100'000 pC
PD input impedance	50 Ω
PD readout	LCD graphics digital, analogue
PD uncertainty	$\pm 3\%$ of range
PD output	$\pm 1V$, 50 Ω
High pass of broadband filter	selectable 20 kHz or 100 kHz / 6 dB
Low pass of broadband filter	selectable 200 kHz or 400 kHz / 6 dB
Auto calibration	10 pC – 10 000 pC
Auto ranging	PD and voltage measurement
Oscilloscope output	Voltage proportional sine and PD proportional signal
Voltage measurement	100 V... 1 MV
Frequency range of voltage measurement	45 ... 150 Hz
Voltage scale factor	1 ... 10' 000
Uncertainty of voltage measurement	$\pm 1\%$ of reading
Interface	RS232 (for data transfer and remote control)
Dimensions	455 x 130 x 350 (w x h x d in mm) (19")
Weight	approx. 6 kg, 20 lb.
Power mains request)	230/115 V / 50/60 Hz / 25 VA (other voltages on request)

Coupling device

PD and AC signal are mixed in a single 50 Ohm coax cable

input impedance of PD-channel	200 Ω (or 500 Ω for cable measurements)
AC channel input impedance	1 M Ω
Bandwidth of PD-channel	20 kHz ... 2 MHz / 6 dB
Bandwidth of AC-channel	45 Hz ... 450 Hz
Max. AC input voltage	100 V _{peak} /√2
AC divider capacitance	standard 1 μ F (optional up to 40 μ F)
Output impedance	50 Ω / 20 kHz ... 2 MHz

Battery Calibrator

Supplied with calibration certificate

Charge values	5 - 10 - 100 - 1000 pC
Output capacitance	< 150 pF
Rise time	< 60 ns
Power supply	9 V battery type 6LR61
Battery life	> 20 hours of continuous operation
Synchronisation	optical pick-up of power frequency from nearby lamps
Uncertainty	$\pm 3\%$

Measuring Cable

Coaxial 50 Ω / 20 m BNC- BNC

Option : Software for displaying and data processing

Type PD-1MOD-CP00

processing the measurements
displaying the measurements
printing
saving
transfer to Excel
data transfer by RS232 interface