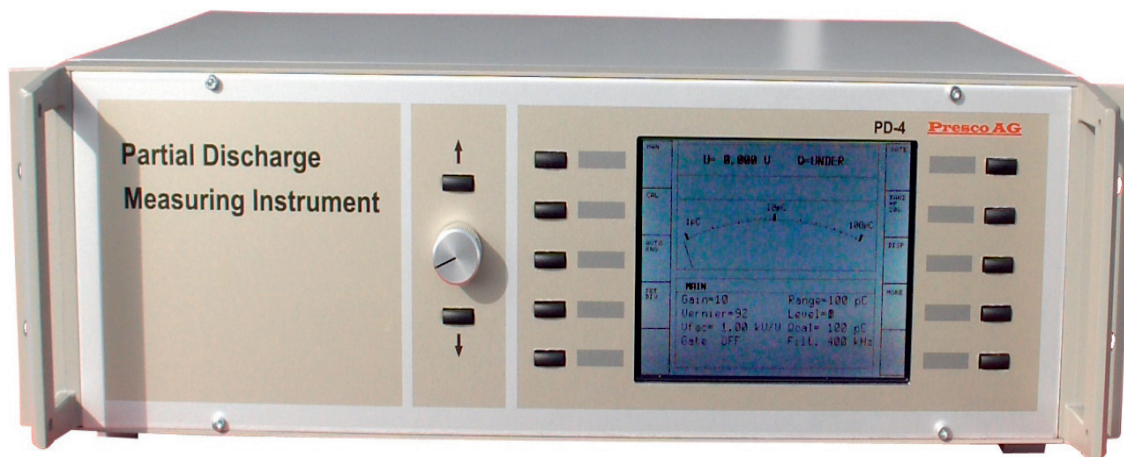


# Professional Partial Discharge Measuring System Type PD-4



- o Diagnosis of high voltage insulation
- o Fulfils standard IEC 60270
- o Selectable broad band filters
- o Adjustable narrow band filter
- o Combined analogue and digital display
- o Interference gating, 6 individually adjustable windows
- o Phase resolved pattern, in scope mode or in finger print mode
- o Auto calibration
- o Auto ranging
- o Built-in RS232 interface for transfer of data and phase resolved pattern
- o One cable connection

**Presco AG**

**Zürcherstrasse 70 CH - 8104 Weiningen Switzerland**

Tel.: +41 44 750 63 63 Fax: +41 44 750 63 66 Mail: [info@prescoag.com](mailto:info@prescoag.com) [www.prescoag.com](http://www.prescoag.com)

# Specifications

## Professional Partial Discharge Measuring System

Type PD-4

### Detector

supplied with calibration certificate	
PD ranges	10 - 100 - 1000 - 10'000 - 100'000 pC
PD input impedance	50 $\Omega$
PD readout	LCD graphics digital, analogue or phase resolved pattern
PD uncertainty	$\pm 3\%$ of range
PD output	$\pm 1V$ , 50 $\Omega$
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
Middle frequency of narrow band filter	selectable 60... 250 kHz
Bandwidth of narrow band filter	9 KHz
Gating	up to 6 individual adjustable gates (hardware gating)
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
Display	analogue, digital, PD activities as y(t) plot as lines or dots, persistent or cumulated, PD pattern
Interface	RS232 (for data transfer and remote control)
Dimensions	455 $\times$ 130 $\times$ 350 (w $\times$ h $\times$ d in mm) (19")
Weight	approx. 6 kg, 20 lb.
Power mains	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 $\Omega$ (or 500 $\Omega$ for cable measurements)
AC channel input impedance	1 M $\Omega$
Bandwidth of PD-channel	20 kHz ... 2 MHz / 6 dB
Bandwidth of AC-channel	45 Hz ... 450 Hz
Max. AC input voltage	100 V <sub>peak</sub> / $\sqrt{2}$
AC divider capacitance	standard 1 $\mu$ F (optional up to 40 $\mu$ F)
Output impedance	50 $\Omega$ / 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 $\Omega$ / 20 m BNC- BNC
---------	-----------------------------