

Technical data and ordering information

Technical data DIRANA

Voltage source

Measurement voltage	200 V _{peak}
Maximum continuous output current	50 mA _{peak}

Power/dissipation factor, capacitance

Dissipation factor range	0...100
Accuracy for ¹ :	
1 MHz < f < 100 Hz	1 % + 3 × 10 ⁻⁴
f < 1 MHz and f > 100 Hz	2 % + 5 × 10 ⁻⁴
Capacitance	10 pF ... 100 μF
Accuracy	0.5 % + 1 pF

Time domain current measurement (PDC+)

Range	±10 mA
Accuracy	0.5 % ± 1 pA

Frequency Domain Spectroscopy (FDS)

Measurement voltage	200 V _{peak}
Measurement current	±50 mA _{peak}
Max. AC interference (50 Hz / 60 Hz) ¹	10 mA (SNR: 1:10)

Frequency ranges

FDS frequency range	5 kHz ... 10 μHz
FDS & PDC+ frequency range	5 kHz ... 10 μHz
PDC+ frequency range	100 mHz ... 10 μHz

Typical measuring time (FDS & PDC+)¹

1 kHz ... 1 mHz	9 minutes
1 kHz ... 100 μHz	Between 15 min and 54 min
1 kHz ... 10 μHz	Between 30 min and 1 h 44 min

Mechanical data / supply voltage

Dimensions (w × h × d):	
Device	260 × 50 × 265 mm/ 10.2 × 2 × 10.5 inch
Case	604 × 466 × 307 mm/ 24 × 18 × 12 inch
Weight:	
Device	2.3 kg / 5 lbs
Complete set	20 kg / 44 lbs
Supply voltage	85 V ... 265 V
Frequency	50 Hz ... 60 Hz

Environmental conditions

Ambient temperature	
in operation	-10 °C ... +55 °C / +14 °F ... 131 °F
for storage	-35 °C ... +65 °C / -31 °F ... 149 °F
Relative humidity	5 % ... 95 %, non-condensing
Air-pressure (storage/operation)	70 kPa ... 106 kPa
Voltage withstand of output and measurement inputs	> 2kV (1.2 μs / 50 μs lightning impulse)

¹ For capacitances > 100 μF using default settings

System requirements² for PTM

Operating system	Windows 10™, 64-bit Windows 8™ and 8.1™, 64-bit Windows 7™ SP1, 32-bit and 64-bit
CPU	Multicore system with 2 GHz or faster Single core system with 2 GHz or faster
RAM	minimum 4 GB (8 GB)
Hard disk	minimum 5 GB of available space
Storage device	DVD-ROM drive
Graphics adapter	Super VGA (1280×768) or higher-resolution video adapter and monitor ³
Interface	USB 2.0 ⁴ , Ethernet NIC ⁵
Installed software ⁶	Microsoft Office® 2016 , Office® 2013, Office® 2010 or Office® 2007

² Recommended system requirements marked in bold

³ Graphics adapter supporting Microsoft® DirectX 9.0 or later is recommended.

⁴ USB 2.0 is needed for operation with FRANEO 800 and DIRANA.

⁵ The Ethernet NIC is need for operation with CPC 100 and CIBANO 500.

⁶ Installed software required for the optional Microsoft Office® interface functions.

DIRANA packages

	Description	Order No.
DIRANA set	DIRANA comes in a rugged case which contains all necessary accessories such as 18 m long connection cables with clamps, drums etc. and the operating software Primary Test Manager™	VE000670

