
TECHNICAL SPECIFICATIONS

Dimensions				
Size	54.6 x 34.7 x 24.7 cm (21.5" x 13.66" x 9.72")			
Weight				
Instrument	24.9 kg (single case)	(55 lb)		
Cable / Accessory Bag	16.2 kg	(35.7 lb)		
Environment				
Operating Temperature	-10 .. 50°C	(14..122° F)		
Storage Temperature	-20 .. 70°C	(-4..158° F)		
Relative Humidity	5 .. 95 % r.h. non-condensing			
Standards				
Safety	IEC 61010-1 (2010)	EN 61010-1:2001(ZEK 01.4-08)		
EMC	EN 61000-3-2 (2006)	EN 61000-3-3 (2008)	EN 61000-4-2 (2009)	
	EN 61000-4-3 (2010)	EN 61000-4-4 (2004)	EN 61000-4-5 (2006)	
	EN 61000-4-6 (2007)	EN 61000-4-11(2004)	EN 55011 +A1(2009)	
Drop Test	IEC 60068-2-31 Edition 4.0 (face, corner, free fall)			
Shock & Vibration	IEC 60068-2-6	IEC 60068-2-27	MIL-STD-810G	
	IEC 60068-2-64 Edition 2.0			
Aging Cycle	MIL-T-28800			
Inputs				
Power	90 .. 264 VAC 50/60 Hz, 800 W, active PFC (acc. IEC61000-3-2)			
Measurement	≤ 180 mA _{RMS}			
Output				
Voltage	25 .. 12'000 V _{RMS} (@ 45 .. 70 Hz)			
Frequency	15 .. 400 Hz (Voltage ≤ 5 kV)			
Current	180 mA _{RMS}			
DUT Capacitance	max. 47 nF @ 12 kV _{RMS} @ 50 Hz, max. 39 nF @ 12 kV _{RMS} @ 60 Hz			
Measurement				
	Resolution	Accuracy		
Dissipation / Power Factor	0.0001	± 0.5 % rdg ± 0.0001 @ 50..60Hz		
tan δ/ cos φ	0.01 %	± 0.5 % rdg ± 0.01 % @ 50..60Hz		
Capacitance	0.01 pF	± 0.3 % rdg ± 0.3 pF		
Test Voltage	1 V	± 0.3 % rdg ± 1V		
Test Current	0.1 µA	± 0.3 % rdg ± 1 µA		
Watts / Power	0.1 mW, mVA, mVAR	± 0.8 % rdg ± 1 mW, mVA, mVAR		
Quality Factor	0.0001	± 0.5 % rdg ±0.0001		
Internal Reference	100 pF Reference Capacitance, tan δ < 0.00001 Temperature coefficient < 0.01 % / K, Capacitance ageing < 0.01 % / year			
Safety Features	Open Ground Detection Security handheld switch, foot switch (optional) internal warning indicator, external warning lamp (optional) audible warning signal			
Interfaces	USB 2.0 for Memory Stick, Ethernet, Thermal Printer			
Display	7" TFT , 800 x 480, Colour Touch Screen			
Data Formats	XML, CSV			
Record Values	DF (tan δ)	DF (tan δ) _{@20°C}	DF%(tan δ)	DF%(tan δ) _{@20°C}
	PF (cos φ)	PF (cos φ) _{@20°C}	PF%(cos φ)	PF%(cos φ) _{@20°C}
	Capacitance Cx	Resistance Rx	Inductance Lx	Frequency f
	Test Current Ix	Mains frequency fm	Noise frequency fn	Apparent Power S
	Real Power P	Reactive Power Q	S/N Ratio	Quality Factor QF
	Ref Current In	Capacitance Cn	Current I _{mag} (Lp)	Current I _{fe} (Rp)
	Phase-angle φ (Zx)	Voltage U _{RMS}	Insulation Temp.	Temp.Corr.Factor K
	Conditions	Comments	Connection mode	Time/Date
	Settings			
Calibration Interval	2 years recommended			