

smart VLF™

5-in-1 Universal
High Voltage
Diagnostic
Testing System

45kV
with Intergrated
Tan Delta!

HVA 45 TD

Automatic TD Evaluation
USB & Bluetooth Connectivity
35kV Diagnostics Testing
25kV Acceptance Testing



Condition Assessment	TD Temporal Stability μSU0 [E-3]		Differential TD [E-3] 1.5U0-0.5U0		TD 1U0 [E-3]
No Action Required	≤ 0.1	AND	≤ 5.0	AND	≤ 4.0
Further Study Advised	0.1 - 0.5	OR	5.0 - 80.0	OR	4.0 - 50.0
Action Required	> 0.5	OR	> 80.0	OR	> 50.0

Features:

- Max Output Voltage: 45kV pk / 32kV rms
- Pure Sinusoidal Output Voltage
- High Test Load Capacity of 10 μf
- USB and Bluetooth Connectivity
- VLF AC, DC, Jacket/Sheath, Fault Conditioning Test Modes
- In Compliance with: IEEE400, 400.2, IEC60502-2, CENELEC HD620/621
- Automatic, Easily Programmable Test Sequences
- Automatic TD Evaluation
- Reporting Software Included
- 4.3" Color Display with Intuitive Menu Operation
- Vacuum Bottle Testing
- Optional: Partial Discharge Interface

Rugged
Portable
VLF & TD
86lbs / 39kg



HV Diagnostics
INC.



smart VLF™

HVA 45 TD

Technical Data

Model		HVA45 TD
Ordering Information		745 003
Input Supply Voltage		100 - 240 V 50/60 Hz
Input Supply Power		1.2kVA
Output Voltage (Max.)	Sinewave	0 - 45 kV _{peak} , 32 kV _{rms}
	DC	± 0-45 kV
	Squarewave	45 kV
	Accuracy	± 1%, Resolution: 0.1 kV,
Output Current		0-60 mA, Accuracy: ± 1%, Resolution: 1 µA
Resistance Range		0.1 MΩ - 20 GΩ
Output Frequency		0.01-0.1 Hz in Steps of 0.01 Hz (default 0.1 Hz) Automatic Frequency Optimization
Output Load		1 µF @ 0.1 Hz @ 32 kV _{rms} 10.0 µF @ 0.01 Hz @ 32 kV _{rms} 10.0 µF Maximum Capacitance*
Sheath Test		Max Test Voltage: 10 kV Trip Current: 0.1 mA - 5.0 mA
Sheath Fault Location		Max Test Voltage: 10 kV Pulse/Period: 1:3 / 4 s, 1:5 / 4 s, 1:5 / 6 s, 1:9 / 6 s
Metering		Voltage and Current (True rms and / or Peak), Tan Delta Capacitance, Resistance, Time, Flashover Voltage
Tan Delta Measurement		Accuracy ± 1 x 10 ⁻⁴ . Fully Compliant with IEEE400.2
Duty Cycle		Continuous !
Test Modes		Manual & Automatic
Output Modes		AC (VLF) Sinewave Symmetrical and Load-Independent Across Full Range, DC (Plus or Negative Polarity), Burn/Fault Condition or Fault Trip Mode, Jacket/Sheath Testing, Squarewave
Safety		50 / 60 Hz - 12kV Feedback Protection / Dual Discharge System (internal)
Computer Interfaces		Bluetooth and USB
Record Storage		Built-in Memory: Up to 50 Reports, 50 Test Sequences USB Flash Drive: Unlimited
PC Software		"HVA Control Center" and "TD Control Center" Windows Compatible
Weight		39 kg/ 86 lbs
Dimensions		500 mm x 305 mm x 457 mm/ 19.7" x 12" x 18"
Environment		Storage Temperature: -25°C to 70°C (-13°F to 158°F) Operating Temperature: -20°C to 55°C (-4°F to 131°F) Humidity: 5-70% Non-Condensing
Upgrades (Optional)		Partial Discharge Diagnostic System PD60/PD60-2
		Rugged Transport Case for HVA45/TD and All Accessories. Part # 745 005
*At Lower Frequency and Voltage		

Note: Due to continuous development, the information detailed in this document may change without notice.



Optional Transport Case



PD60-2