## HVA45TD

the smallest VLF test system of its performance class with integrated Tan Delta diagnostics system



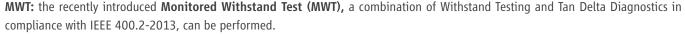


39 kg



integrated TD diagnostics

The HVA45TD is a truly compact and portable VLF test set system for testing medium voltage cables. It performs VLF and DC testing, sheath testing with sheath fault location mode and TD leakage current correction (guard terminal) is included. Assessments of cable condition can also be carried out by use of Tan Delta Diagnostics.



**Performance:** the HVA45TD offers outstanding features in terms of size, weight (39 kg) and performance (max. 10  $\mu$ F).

**Safety:** the instrument has two independent earthing devices (electronic and mechanical discharging) and an integrated 12 kV feedback protection system to protect both operator and instrument.

Field use: a watertight and very rugged case with a protection class of IP67 makes additional transport boxes obsolete.

**Connectivity:** on site, no external PC is needed. All results can be downloaded later by USB or Bluetooth for further investigation and easy report creation on the PC Software.

Unlimited operating time: Operating time of the HVA high voltage generators are not thermally limited and can be operated continuously.







#### **Features**

- Output voltage 45 kV<sub>peak</sub>, 32 kV<sub>rms</sub>
- + 3 kV option\*: 48 kV<sub>neak</sub>, 34 kV<sub>rms</sub>
- Pure sinusoidal output voltage (load-independent)
- Internal TD measurement with high accuracy (1 x 10<sup>-4</sup>)
- Tan Delta measurement with various frequencies (0.01-0.1 Hz)
- Leakage Guard® leakage current correction
- Output current 60 mA max.
- 1.0 µF @ 0.1 Hz @ 32 kV rms
- Highest test capacity of 10 μF
- Ultra light and compact weight (39 kg)

- Protection class IP67 (with closed lid)
- Total protection: almost unbreakable, watertight, dustproof and corrosion proof case
- Large Colour display (4,3")
- USB and Bluetooth connections
- Cable testing according: IEC60502-2:2015, IEEE 400.2-2004, CENELEC HD 620/621, IEEE400.2-2013 etc.
- Programmable test sequences
- Upgradable with Partial Discharge diagnostics system (optional)
- 12 kV transient protection (50 Hz)

- Dual Discharge Device (DDD®), integrated electronic and mechanical discharge devices
- Easily exchangeable HV cable
- Intuitive menu operation
- Sheath Fault Locating (in combination with Earth Fault Locator) (not included)
- · Vacuum Bottle Test
- Insulation Testing



# **HVA45TD**



dry system



upgradeable to PD diagnostics system



unlimited operating time



Trolley type

Туре		HVA45TD
Article number		SH5011
Input voltage		100-240 V, 50/60 Hz, 1200 VA
Output voltage	VLF sine wave	0-45 kV peak, 32 kV rms
	+3 kV Option*	0-48 kV peak, 34 kV rms (Art. Nr. GH5845)
	DC	± 0-45 kV
	VLF square wave	0-45 kV
	accuracy	± 1 %
	resolution	0.1 kV
Output current		0-60 mA
Resistance range		0.1 ΜΩ-5 GΩ
Output frequency		0.01-0.1 Hz in steps of 0.01 Hz default: 0.1 Hz (auto frequency)
Tan Delta	accuracy	± 1 x 10 <sup>-4</sup>
Output load		1.0 μF @ 0.1 Hz @ 32 kV rms 10.0 μF maximum Capacitance! <sup>1</sup>
Sheath test	max. test voltage	10 kV
	trip current	0.1-5.0 mA
Sheath fault location <sup>2</sup>	max. test voltage	10 kV
	Pulse/Period	1:3 / 4 s, 1:5 / 4 s, 1:5 / 6 s, 1:9 / 6 s
Output Modes		AC (VLF) Symmetrical and load independent across full range, DC (plus or negative polarity), Burn-/Fault Condition or Fault Trip Mode, Jacket/Sheath Testing
Safety		12 kW/50 Hz Feedback Protection   integrated electronic and mechanical discharge devices - DDD®: Dual Discharge Device (internal)
Memory		50 Test Record Stored, USB almost unlimited
Metering		Voltage and Current (True rms and/or peak), Capacitance, Resistance, Time, Flashover Voltage
Duty cycle		Continuous! No thermal limitation for operating time.
HV-Cable		5 m with clamps
Software		"b2 ControlCenter" (included)
Computer interfaces		Bluetooth and USB flash drive
Dimensions LxWxH		500 x 305 x 457 mm (Peli Case)
Weight		39 kg
Environment		temperature: storage -25°C to + 70°C, operating -20°C to + 55°C humidity: 5-85 % non condensing

### **Options**

• Partial Discharge diagnostics system

### Scope of delivery

- HVA45TD testing device incl. Tan Delta diagnostics
- PC Software b2 ControlCenter
- HV cable 5 m
- Power and earthing cable
- Accessory bag
- **USB Stick**
- Operating manual

<sup>&</sup>lt;sup>1</sup> at lower frequency and voltage | <sup>2</sup> in combination with locating device (not in scope of supply)

\* default: the HVA45TD is supplied with an output voltage of 45 kV <sub>peak</sub> 32 kV <sub>met</sub>. The option +3 kV must be ordered additionally.