

# HVTS-70/50 PORTABLE AUTOMATIC DC/ AC HIGH-VOLTAGE TEST SYSTEM

Portable high-voltage test system **HVTS-70/50 DC/AC HIPOT** is an effective and cost efficient solution for high-voltage testing of solid dielectrics with low and medium electric capacitance (power cables, switchgear, surge arresters, busbars, insulators, etc.) with **DC (rectified) voltage up to 70 kV** and high-voltage testing of other objects with **AC voltage up to 50 kVRms** at industrial frequency ( $f = 50 \text{ Hz}$ ).

HVTS is a latest generation AC/DC HIPOT that provides **Automatic Cycle** tests with option of Manual cycle testing

HVTS-70/50 benefits from a **graphic display** and **digital control**, which allows to run tests in manual and automatic cycles, as well as **store test results** in internal memory of the system. All measurements are displayed on the **backlit LCD display**, with analog ammeter & voltmeter emulated on the digital display. Provided in an easy to transport car to allow easy on field testing.

Output voltage type is selected by a simple push of a button on the control unit – no additional equipment installation (e.g. rectifier) is required.

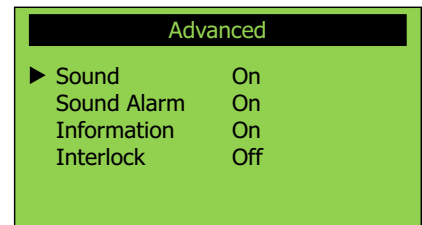
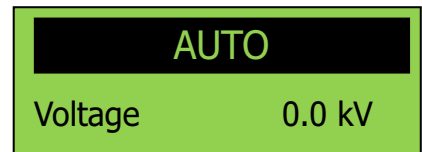
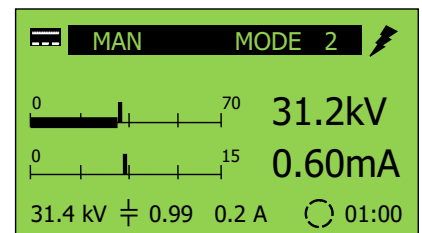
The system comprises of **two separate modules** – a **control unit** and a **high-voltage unit**. The control unit is powered from industrial mains and used to control the high-voltage unit from a safe distance. The high-voltage unit contains a step-up transformer with oil insulation.

The system features an over current and over voltage protection and is equipped with a built in automatic grounding bar.



## Features:

- DC & AC test modes
- Safe two-module composition
- Portable design
- Graphic display and digital control
- Automatic & Manual test cycles
- Internal memory for test results storage
- Built-in automatic grounding bar
- Overcurrent and overvoltage protection



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## Specifications:

DC testing Parameters	Voltage	Output level	Upto 70 kV
		Relative measurement error	± [3 % + 2 dgt]
	Current	Output level	Upto 15 mA   optional :25mA *
		Relative measurement error	± [3 % + 2 dgt]
AC testing parameters	Voltage	Output level	Upto 50 kV <sub>RMS</sub>
		Relative measurement error	± [3 % + 2 dgt]
	Current	Output level	Upto 40 mA <sub>RMS</sub> *
		Relative measurement error	± [3 % + 2 dgt]
	Load capacitance in AC mode @ rated output voltage	Upto 1.6 nF	
System parameters	Test modes	<ul style="list-style-type: none"> <li>Automatic &amp; Manual</li> </ul>	
	Voltage ramp rate	0.5 ... 4.0 kV/s, step 0.5 kV/s	
	Internal memory	32 test reports	
Interface	Monochrome graphic display	128 × 64 px	
	Menu languages	English	
	Timer	Preset ranges of 1 minute, 5 minutes ; plus custom set range between 10 to 59.59 minutes, programmable	
	Output voltage / current limit control	Maximum Output voltage and current limits settable	
	Instrument control	<ol style="list-style-type: none"> <li>Push button for menu control, AUTO Test, Timer control</li> <li>Rotary knob with encoder to change output level manually</li> <li>Start button</li> </ol>	
	Date/Time	Settable and displayed on system	
	Audio	Option for sound ON/OFF	
	Voltmeter & Ammeter	Emulated on Digital display	
	Alarms	Audio + visual alarm at breakdown trip	
	Safety	Protection	<ul style="list-style-type: none"> <li>Over-voltage tripping</li> <li>Over-current tripping</li> <li>Automatic grounding bar</li> </ul>
Compliance		<ul style="list-style-type: none"> <li>Conformance to EMC Emissions</li> <li>Conformance to EN 61326-2-1 : 2013</li> <li>Conformance to EN 61010-1 : 2010</li> </ul>	
Certification		CE Certified	
Power supply and consumption	Supply voltage & Supply frequency	230 V ± 10 %, AC (110 V option) 50 Hz (60 Hz option)	
	Power consumption	up to 2.5 kVA	
	Current consumption	up to 10 A @ 230 V	
Physical	CU dimensions, H × W × D	265 × 349 × 240 mm	
	CU weight	13 kg	
	HVU dimensions, H × W × D	500 × 360 × 310 mm	
	HVU weight	35 kg	
	Supply includes	<ul style="list-style-type: none"> <li>HV Test cable, 1mm<sup>2</sup>, 4 meters length, red color</li> <li>Power supply cable, 5meters length, black color</li> <li>Earthing cable, 4mm<sup>2</sup>, 4 meters length</li> <li>Operating grounding cable, 4mm<sup>2</sup>, 4 meters length</li> </ul> Optional : Transport trolley	

\* To be specified at time of ordering

\*\* If the output current exceeds 50 % of the total possible current output, do not operate the system in the continuous duty cycle for longer than 10 minutes; if the output current exceeds 75 % – 1 minute.