TEST ELECTRONICS' TE-10,000
High Voltage Surge Tester

For surge testing: transformers, inductors, and other magnetic windings

TE-10,000 HVST

Order # TE-10,000 HVST

The most important features of the surge tester are its ability to test the entire winding insulation system. A high voltage surge generates turn to turn, coil to coil, and phase to phase voltage stress, as well as ground insulation stress. When used as a dielectric test, accurate voltage readings are essential. The HV Surge Tester monitors the voltage directly across the winding under test. This voltage is displayed on an oscilloscope and recorded on the Pass/ Fail LED latch monitor. This voltage will be accurate despite the impedance of the winding being tested. The insulation system can be tested way above the operating voltage because of the brief duration of the applied voltage test pulse. This allows faults to be detected long before they become apparent at operating conditions.

Features

- Digital Voltage metering and a feedback regulated high frequency switching power supply gives precise voltage control, and high power in a compact package.
- An internal 120V or 240V 60Hz power supply is provided. This power supply voltage is used to power up the unit under test. The surge voltage is then superimposed on top of this providing power on surge testing.
- AC input jack for adding any AC signal from 0-600VAC 50-500HZ on the HV output. Used for High line, low line surge testing.
- Internal 1000:1 divider oscilloscope monitor jack simplifies monitoring the pulse with a storage scope by eliminating the need for a big cumbersome HV scope probe.
- The top of the surge tester doubles as a safe insulated testing area. This innovative design saves bench space, costly safety equipment, and eliminates those dangerous high voltage test leads. Above all, it eliminates test lead ringing, minimizing RF noise emission, and false scope triggering. Resulting in extremely accurate test results.

Computer Controlled Testing

The surge tester uses the standard RS232 serial interface for computer controlled testing. The write function initializes a surge while the read function monitors the Pass/ Fail indicator. Also, a D-A converter can be used to adjust the surge voltage level. The computer controlled testing will greatly reduce production time when multiple surge testing and variable surge voltages are required.

Test system compatiblity:

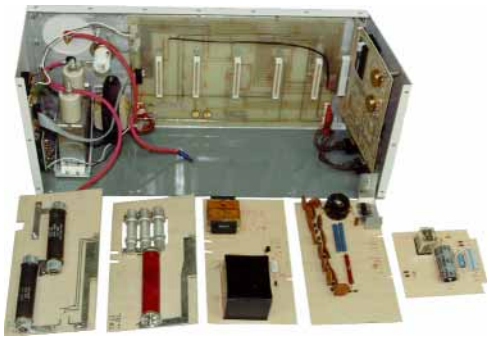
- √ Windows NT/95/98
- √ Windows 3.1
- √ DOS
- √ Mac OS

Test Electronics, a leader in test fixture technology has teamed up with National Instruments a leader in Virtual instrumentation to bring you high quality cost effective solutions to GPIB based test systems!

The GPIB Boards shown here are products of National Instruments™

Easily Upgraded for Different Applications

The Surge Tester's internal circuitry consists of a back plane interconnecting 6 modular plug in wave shaping and signal processing boards. These boards are readily available and may be easily swapped to generate almost any surge wave form. The default internal power supply voltage may be changed simply by swapping the power supply board.



Safety Features

- Top of the unit doubles as a safe insulated testing area, saving bench space.
- Polycarbonate cover protects the operator from flying debris.
- Tinted cover prevents blinding flashes.
- Magnetic reed switch safety interlock disables all power to the test terminals when the cover is lifted.
- These safety features make it nearly impossible to touch the HV parts unintentionally. While the unit is in operation.

Specifications

Tests Per	ANSI/IEEE C62.41-1989
Peak pulse voltage	100-10,000 (Volts) Adjustable
Peak breakdown current	1000 (AMPS)
Circulating current	187 (AMPS)
Pulse Energy	5.0 (Joules)
Recharge time	300 (milliseconds)

Test Electronics, a leader in test fixture technology. Creating innovations in testing by utilizing the latest high tech tools to their full potential.

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