

U.S. Patents: 6,054,865 - 5,828,222 - 5,936,419 - 5,548,501.

HYPOTULTRA® III



Fully-Automated Dielectric Withstand Analyzer

Model 7620

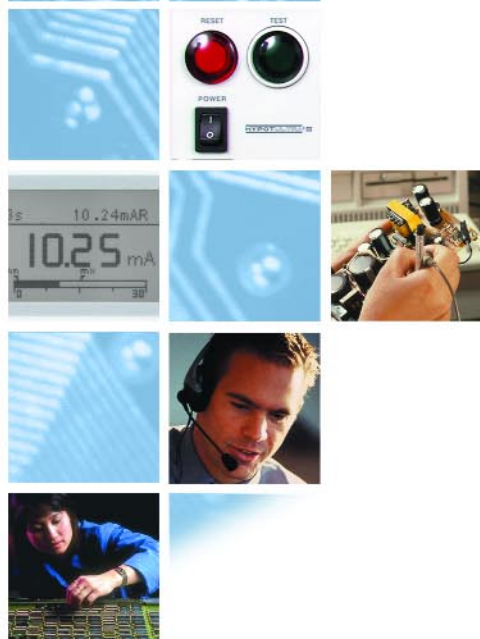
5 KV AC Hipot Tester. Internal 4 or 8 Port
Scanning Matrix available

Model 7650

5 KV AC Hipot Tester, 6 KV DC Hipot & Insulation Resistance
Tester. Internal 4 or 8 Port Scanning Matrix available

Features and Benefits

- Patented SmartGFI® safety circuit protects the operator from shock hazards
- Patented VERI-CHEK® feature prompts the users through steps to validate the instrument's operation
- Patented Prompt and Hold function provides a unique method for performing multiple steps during a test cycle
- Patented CAL-ALERT® alerts the operator when the HypotULTRA III is due for re-calibration
- Patented RAMP HI and CHARGE LO for more effective DC Hipot testing
- Two Continuity Test modes allow for simultaneous continuity tests during Hipot testing as well as point-to-point continuity testing
- RS-232 or GPIB automation interfaces available. Use your own software or our stand alone test software
- Data Storage card available for storing and transferring test data without a connection to a PC
- Graphic LCD and intuitive menu system to simplify the entire testing process from set-up to results
- 50 memories with 30 steps per memory that can be stored and recalled in any alphanumeric combination
- Real current measurement allows operators to monitor total and real current on a single screen
- Advanced functionality available with an optional 4 or 8 port internal scanner



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Input Specifications

Voltage	115 / 230 VAC ± 10%, Automatically Selected
Frequency	50/60 Hz ± 5%
Fuse	4 Amp 250V Slo-Blo

DIELECTRIC WITHSTAND TEST MODE

Output Rating	5 KV @ 30 mA AC 5 KV @ 10 mA DC for 7650 only
Ramp-HI	12mA peak maximum, ON/OFF selectable
Charge-LO	Range: 0.0 - 350.0 µA DC or Auto set
Maximum & Minimum Limits	
AC Total	Range: 0.000 - 30.00mA Accuracy: ± (2% of setting + 2 counts)
AC Real	Range: 0.000 - 30.00mA Accuracy: ± (3% of setting + 0.05mA) All Ranges PF > 0.1 V > 250VAC
DC	Range: 0.0 - 10000µA for 7650 only Accuracy: ± (2% of setting + 2 counts)
Arc Detection	Range: 1 - 9
Voltage Display	Range: 0.00 - 5.00 KV Full Scale Accuracy: ± (2% of setting + 2 counts)
Current Display	Auto Range
AC Total	Range: 0.000mA - 30.00mA Accuracy: ± (2% of reading + 2 counts)
AC Real	Range: 0.000mA - 30.00mA Accuracy: ± (3% of reading + 0.05mA) All Ranges PF > 0.1 V > 250VAC
DC	Range: 0.0 µA - 9.99mA for 7650 only Accuracy: ± (2% of reading + 2 counts)
DC Output Ripple	≤ 4% Ripple RMS at 5 KV DC @ 10 mA, Resistive Load
Discharge Time	≤ 200 ms
Maximum Capacitive Load in DC Mode	1µF—< 1KV 0.08µF—< 4KV 0.75µF—< 2KV 0.04µF—< 5KV 0.5µF—< 3KV
AC Output Wave Form	Sine Wave, Crest Factor = 1.3 - 1.5
Output Frequency	Range: 60 or 50 Hz, User Selection Accuracy: ± 0.1%
Output Regulation	± (1 % of output + 5 V) From no load to full load and over input voltage range
Dwell Timer	Range: 0.0, 0.4 - 999.9 sec (0 = Continuous)
Ramp Timer	Range: Ramp-Up: 0.1 - 999.9 sec Ramp-Down: AC 0.0 - 999.9 sec DC 0.0, 1.0 - 999.9 sec 0.0=OFF
Ground Continuity	Current: DC 0.1 A ± 0.01A, fixed Max. ground resistance: 1 Ω ± 0.1Ω, fixed
Ground Fault Interrupt	GFI Trip Current: 450 µA max (AC or DC) HV Shut Down Speed: < 1ms

INSULATION RESISTANCE TEST MODE, MODEL 7650 ONLY

Output Voltage	Range: 50 - 1000 Volts DC
Short Circuit Current	Maximum: 12mA peak
Resistance Display	Range: 0.05MΩ - 50000 MΩ (5 Digit, Auto Ranging) Resolution: 500VDC 1000VDC MΩ MΩ MΩ 0.001 0.050 - 9.999 0.100 - 9.999 0.01 1.00 - 99.99 1.00 - 99.99 0.1 10.0 - 999.9 10.0 - 999.9 1 100 - 50000 100 - 50000
Charge-LO	Range: 0.000 - 3.500µA or Auto Set
Maximum and Minimum Limits	Range: 0.0, 0.05MΩ - 50000MΩ (Max Limit: 0 = OFF)
Ramp Timer	Range: Ramp-Up: 0.1 - 999.9 sec Ramp-Down: 0.0, 1.0 - 999.9 sec
Delay Timer	Range: 0.0, 1.0 - 999.9 sec 0 = Continuous
Ground Fault Interrupt	GFI Trip Current: 450 µA max HV Shut Down Speed: < 1ms

CONTINUITY TEST MODE

Output Current	DC 0.1A ± 0.01A Total Resistance*: 0.00-33.0 Ω DC 0.01A ± 0.001A Total Resistance*: 31.0-330 Ω DC 0.001A ± 0.0001A Total Resistance*: 310-2000 Ω
Resistance Display	Range: 0.00 - 2000 Ω
Maximum and Minimum Limits	Range: 0.00 - 2000 Ω (Max Limit: 0 = OFF)
Dwell Timer	Range: 0.0, 0.3 - 999.9 sec (0 = Continuous)
Milliohm Offset	Range: 0.00 - 10.00Ω

GENERAL SPECIFICATIONS

PLC Remote Control	Input: Test, Reset, Interlock, Recall Memory 1 through 10 Output: Pass, Fail, Test-in-Process, Reset
Safety	Built-in Smart GFI circuit
Memory	50 memories, 30 steps/memory
Interface	Standard RS-232, Optional Printer Port with Date and Time Stamp, GPIB, or Data Storage.
Security	Programmable password lockout capability to avoid unauthorized access to test set-up program.
Graphic Display	240 x 64 dot resolution. Monographic LCD
Calibration	Adjustments are made through the front panel. Built-in Verification program. Automatic Calibration alert function to signal operator when calibration is due.
Mechanical	Bench or rack mount (2U height) with tilt up front feet Dimensions:(w x h x d) 16.92x3.50x15.75in (430x89x400mm)
Weight	31.38 Lbs (14.23 kgs) variable with options

Specifications subject to change without notice.



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- Industry seminars, expert training & education programs
- Local sales offices throughout the world

*With annual calibration from Associated Research.