

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

# HYPOTULTRA® III



Safety agency listed.

## Fully-Automated Dielectric Withstand Analyzer

### Model 7620

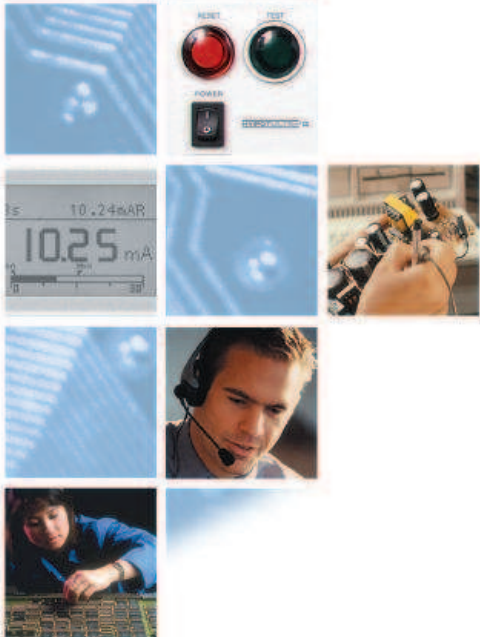
5 KV AC Hipot Tester. Internal 4 or 8 Port Scanning Matrix available

### Model 7650

5 KV AC Hipot Tester, 5 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
- Ethernet, RS-232 or GPIB automation interfaces available. Use your own software or our Autaware 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

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

## DIELECTRIC WITHSTAND TEST MODE

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

## INSULATION RESISTANCE TEST MODE, MODEL 7650 ONLY

<b>Output Voltage</b>	Range: 50 - 1000 Volts DC
<b>Short Circuit Current</b>	Maximum: 12mA peak
<b>Resistance Display</b>	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
<b>Charge-LO</b>	Range: 0.000 - 3.500µA or Auto Set
<b>Maximum and Minimum Limits</b>	Range: 0.0, 0.05MΩ - 50000MΩ (Max Limit: 0 = OFF)
<b>Ramp Timer</b>	Range: Ramp-Up: 0.1 - 999.9 sec Ramp-Down: 0.0, 1.0 - 999.9 sec
<b>Delay Timer</b>	Range: 0.0, 1.0 - 999.9 sec 0 = Continuous
<b>Ground Fault Interrupt</b>	GFI Trip Current: 450 µA max HV Shut Down Speed: < 1ms

## CONTINUITY TEST MODE

<b>Output Current</b>	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
<b>Resistance Display</b>	Range: 0.00 - 2000 Ω
<b>Maximum and Minimum Limits</b>	Range: 0.00 - 2000 Ω (Max Limit: 0 = OFF)
<b>Dwell Timer</b>	Range: 0.0, 0.3 - 999.9 sec (0 = Continuous)
<b>Milliohm Offset</b>	Range: 0.00 - 10.00Ω

## GENERAL SPECIFICATIONS

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

Specifications subject to change without notice.



- Customer support & technical services
- 5-Year extended warranty\*
- 24-Hour turn-around on calibrations
- Industry seminars, expert training & education programs
- Local sales offices throughout the world

\*With annual calibration from Associated Research.