Our new HypotULTRA® models provide all the tools you need to modernize your production line with best-in-class 4-in-1 test capability and a slim 2U design. We’ve added 40A AC Ground Bond test capability to HypotULTRA®’s already impressive feature list for manufacturers that aim to adopt best testing practices without sacrificing productivity. Whether you’re looking to improve traceability with on-board data storage, increase efficiency with our intuitive touch screen interface and direct barcode scanner connection, or automate with a variety of communication interfaces, HypotULTRA® was designed to take your production line to the next level.
INPUT SPECIFICATIONS

Voltage: 100 – 120 VAC / 200 – 240 VAC ± 10% Auto Range

Frequency: 50/60 Hz ± 5%

Fuse: 7804/7820/7850: 6.3A, Slow Blow 250 VAC
7800/7854: 15A, Fast Blow 250 VAC

AC WITHSTAND TEST MODE (All Models)

Output Voltage Range: 0 – 5,000 VAC
Resolution: 1 VAC ± (2% of setting + 5 V)
Accuracy: ± (2% of setting + 5 V) ± (1% of setting + 5 V)

Output Frequency: 50/60 Hz ± 0.1%, User Selection

Output Waveform: Sine Wave, Crest Factor = 1.3 – 1.5

Output Regulation: ± (1% of output + 5 V)

HI and LO-Limit Total

Real Range: 0.000 – 9,999 mA
Resolution: 0.001 mA ± (2% of setting + 2 counts) ± (2% of setting + 6 counts) ± (2% of setting + 50 μA)
Accuracy: ± (2% of setting + 2 counts) ± (2% of setting + 6 counts) ± (2% of setting + 50 μA)

HI and LO-Limit

HI: Output Current: DC 0.1A ± 0.01A
Range: DC 0.1A ± 0.01A, fixed

LO-Limit Total: 0.000 – 10.00 Ω
Resolution: 0.001 Ω ± (1% of setting + 3 counts)
Accuracy: ± (1% of setting + 3 counts)

Dwell Timer: Range: 0.75 μF < 2 kV
Range: 0.04 μF < 5 kV
Range: 1μF < 1kV
Range: 0.0 μF < 4 kV

Dwell Timer: Range: 0.5 – 9999 sec (0=Continuous)
Delay Timer: Range: 0.5 – 9999 sec

RAMP-UP Timer: Range: 0.1 – 9999 sec
RAMP-DOWN Timer: Range: 1.0 – 9999 sec

DC WITHSTAND TEST MODE (Models 7800/7804/7850 & 7854 Only)

Output Voltage Range: 0 – 6000 VDC
Resolution: 1 VDC ± (2% of setting + 5 V)
Accuracy: ± (2% of setting + 5 V)

DC Output Ripple: <4% (6 KV/10 mA at Resistive Load)

HI and LO-Limit: 1 mΩ

Ramp Up Timer: Range: 0.4 – 9999 sec, Low Range is OFF
Range: 0.3 – 9999 sec, Low Range is ON

Ramp Down Timer: Range: 0.0, 1.0 – 9999 sec (0=OFF)

Dwell Timer: Range: 0, 0.4 – 9999 sec (0=Continuous)
Range: 0, 1.0 – 9999 sec, Low Range is ON

Dwell HI-Selectable: Range: 0 – 20 mA selectable

Charge-LO: Range: 0.0 – 350 μA DC or Auto Set

Discharge Time: < 50 ms for no load, < 100 ms for capacitive load

Maximum Capacitive Load: 6.3A, Slow Blow 250 VAC

Arc Detection: 1 – 9 ranges (9 is most sensitive)

INSULATION RESISTANCE MODE (Models 7800/7804/7850 & 7854 Only)

Output Voltage, DC: 10 – 1,000 VDC
Resolution: 1 VDC ± (2% of setting + 2 counts)
Accuracy: ± (2% of setting + 5 V)

Output Voltage: 0.001 – 6,000 VDC
Resolution: 1 VDC ± (2% of setting + 5 V)
Accuracy: ± (2% of setting + 5 V)

RAMP-Up Timer: Maximum > 20 mA peak
Resolution: 0.01 MΩ – 99.9 MΩ (HI-Limit: 0=OFF)
Range: 0.01 MΩ ± (2% of setting + 2 counts)
Accuracy: ± (2% of setting + 2 counts)

RAMP-Down Timer: Maximum > 20 mA peak
Resolution: 0.01 MΩ – 99.9 MΩ (HI-Limit: 0=OFF)
Range: 0.01 MΩ ± (2% of setting + 2 counts)
Accuracy: ± (2% of setting + 2 counts)

RAMP-Up Timer: 0.1 – 99.9 MΩ
Resolution: 0.10 MΩ – 99.9 MΩ (HI-Limit: 0=OFF)
Range: 0.10 MΩ ± (2% of setting + 2 counts)
Accuracy: ± (2% of setting + 2 counts)

RAMP-Down Timer: 0.1 – 9999 Ω
Resolution: 0.1 – 9999 Ω (HI-Limit: 0=OFF)
Range: 0.1 – 9999 Ω ± (5% of setting + 2 counts)
Accuracy: ± (5% of setting + 2 counts)

RAMP-Up Timer: 1 MΩ
Resolution: 0.1 – 10.0 Ω
Range: 0.1 – 10.0 Ω ± (2% of setting + 3 counts)
Accuracy: ± (2% of setting + 3 counts)

RAMP-Down Timer: 1 MΩ
Resolution: 0.1 – 100.0 Ω
Range: 0.1 – 100.0 Ω ± (5% of setting + 3 counts)
Accuracy: ± (5% of setting + 3 counts)

RAMP-Up Timer: 101 – 1,000 Ω
Resolution: 1 D
Range: 101 – 1,000 Ω ± (2% of setting + 3 counts)
Accuracy: ± (2% of setting + 3 counts)

RAMP-Down Timer: 101 – 1,000 Ω
Resolution: 1 D
Range: 101 – 1,000 Ω ± (5% of setting + 3 counts)
Accuracy: ± (5% of setting + 3 counts)

Dwell Timer: Range: 0, 0.4 – 9999 sec (0=Continuous)

Resistive Offset: Range: 0.000 – 10.00 Ω

GROUND BOND TEST MODE (Models 7800/7804/7850 & 7854 Only)

Output Voltage (Open Circuit Voltage): 3.00 – 8.00 VAC
Resolution: 0.01 VAC ± (2% of setting + 3 counts) Open Circuit
Accuracy: ± (2% of setting + 3 counts)

Output Current: 1.00 – 40.00 A
Resolution: 0.01 A ± (2% of setting + 3 counts)
Accuracy: ± (2% of setting + 3 counts)

Maximum Loading: 1.00 – 10.00 A, 0 – 600 mΩ
10.01 – 30.00 A, 0 – 200 mΩ
30.01 – 40.00 A, 0 – 150 mΩ

HI and LO-Limit: 1 MΩ

Resistive Offset: Range: 0.000 – 10.000 Ω

Memory: 2,000 steps, 20 steps per test file max
100,000 test results

Mechanical: Bench or rackmount (2U height) with feet

Interface: Standard: USB, RS-232
Optional: GPIB (IEEE-488.2), Ethernet or USB Printer

SmartGFI™

Dimensions (W x H x D): 16.92” x 3.50” x 15.75” (430 x 88.1 x 400mm)

Weight: 7800: 34 lbs (15.4 kg)
7804: 41 lbs (18.6 kg)
7850: 35 lbs (15.9 kg)
7854: 46.3 lbs (21 kg)