

HypotULTRA®



Our 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 onboard 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.



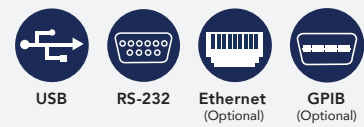
Find the Model that Fits Your Testing Needs



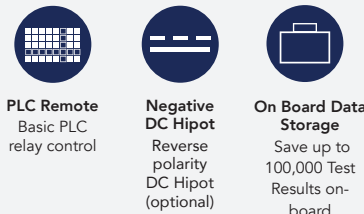
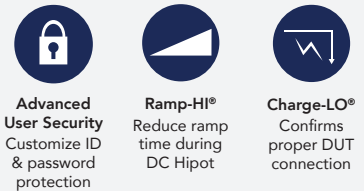
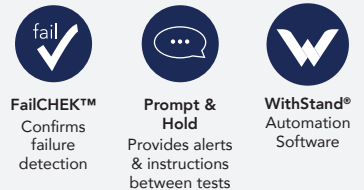
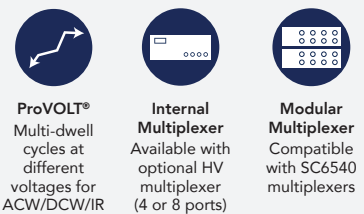
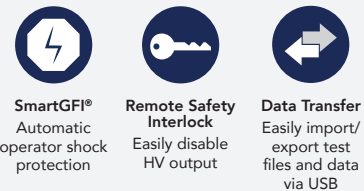
	AC Hipot	DC Hipot	40A Ground Bond	Ground Continuity	Insulation Resistance	
7800	500 VA*	•		•	•	
7804	•	•	•	•	•	•
7820	•			•		•
7850	•	•		•	•	•
7854	500 VA*	•	•	•	•	

*Meets 200 mA short circuit requirements

AVAILABLE INTERFACES



SAFETY & PRODUCTIVITY FEATURES



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: Resolution: Accuracy:	0 – 5,000 VAC 1 VAC ± (1.5% of setting + 5V)	
Output Frequency	50/60 Hz ± 0.1%, User Selection		
Output Waveform	Sine Wave, Crest Factor = 1.3 – 1.5		
Output Regu- lation	± (1% of output + 5V)		
HI and LO-Limit Total	Total	Range: Resolution: Range: Resolution: Accuracy:	0.000 – 9.999 mA 0.001 mA 10.00 – 40.00 mA (10 – 99.99 mA, Models 7800/7854) 0.01 mA ± (2% of setting + 2 counts) 7804/7820/7850 ± (2% of setting + 6 counts) 7800/7854
	Real	Range: Resolution: Range: Resolution: Accuracy:	0.000 – 9.999 mA 0.001 mA 10.00 – 40.00 mA (10 – 99.99 mA 7800/7854) 0.01 mA ± (3% of setting + 50 µA)
Ramp Up Timer Ramp Down Timer Dwell Timer	Range: Range: Range:	0.1 – 999.9 sec 0.0 – 999.9 sec 0, 0.2 – 999.9 sec (0=Continuous)	
Ground Conti- nuity	Current: DC 0.1A ± 0.01A, fixed		
Current	Max. Ground Resistance: 1.0 Ω ± 0.1 Ω		
Arc Detection	Range:	1 – 9 (9 is most sensitive)	
DC WITHSTAND TEST MODE (Models 7800/7804/7850 & 7854 Only)			
Output Voltage	Range: Resolution: Accuracy:	0 – 6000 VDC 1 V ± (1.5% of setting + 5 V)	
DC Output Ripple	<4% (6 KV/10 mA at Resistive Load)		
HI and LO-Limit	Range: Resolution: Accuracy:	0.0000 – 0.9999 µA 0.0001 µA ± (2% of setting + 10 counts), Low Range is ON	
	Range: Resolution: Accuracy:	1.000 – 9.999 µA 0.001 µA ± (2% of setting + 10 counts), Low Range is ON	
	Range: Resolution: Accuracy:	10.00 – 99.99 µA 0.01 µA ± (2% of setting + 10 counts), Low Range is ON	
	Range: Resolution: Accuracy:	100.0 – 999.9 µA 0.1 µA ± (2% of setting + 2 counts)	
	Range: Resolution: Accuracy:	1,000 – 20,000 µA range (7804/54) 1,000 – 10,000µA range (7800/50) 1 µA ± (2% of setting + 2 counts)	
Ramp Up Timer	Range:	0.4 - 999.9 sec, Low Range is OFF 0.5 – 999.9 sec, Low Range is ON	
Ramp Down Timer	Range:	0.0, 1.0 – 999.9 sec (0=OFF)	
Dwell Timer	Range:	0, 0.4 – 999.9 sec (0=Continuous) 0, 1.0 – 999.9 sec, Low Range is ON	
Ramp-HI Select- able	Range:	0 – 20 mA selectable	
Charge-LO	Range:	0.0 – 350.0 µA DC or Auto Set	
Discharge Time	< 50 ms for no load, < 100 ms for capacitive load		
Maximum Capacitive Load DC Mode	1µF < 1kV 0.75 µF < 2 kV 0.5 µF < 3 kV	0.0 µF < 4 kV 0.04 µF < 5 kV 0.015 µF < 6 kV	
Arc Detection	Range:	1 – 9 (9 is most sensitive)	
INSULATION RESISTANCE MODE (Models 7800/7804/7850 & 7854 Only)			
Output Voltage, DC	Range: Resolution: Accuracy:	10 – 1,000 VDC 1 VDC ± (1.5% of setting + 2 counts)	
	Range: Resolution: Accuracy:	1,001 – 6,000 VDC 1 VDC ± (1.5% of setting + 5 V)	
Charging Current	Maximum >10mApeak		
HI and LO-Limit, resistance, MΩ	Range: Resolution: Accuracy:	0.10 - 9 9.99 (HI – L imit: 0 = O FF) 1.00 - 9 9.99 when V >1000V 0.01 ±(2% of setting+2 counts)	

HypotULTRA® Series					
INSULATION RESISTANCE MODE (Models 7800/7804/7850 & 7854 Only)					
HI and LO-Limit, resistance, MΩ	Range: Resolution: Accuracy:	100.0-999.9 0.1 ±(2% of setting +2 counts)	Ramp-Up Timer, second	Range: Resolution: Accuracy:	0.1-999.9 0.1 ± (0.1% + 0.05 sec)
	Range: Resolution: Accuracy:	1000-9999 1 ±(5% of setting +2 counts)	Ramp-Down Timer, second	Range: Resolution: Accuracy:	0.0, 1.0-999.9 0.1 ± (0.1% + 0.05 sec)
	Range: Resolution: Accuracy:	10000-49999 1 ±(15% of setting +2 counts)	Dwell Timer, second	Range: 0, 0.5-999.9 or 0 (0=continuous)	
HI and LO-Limit, resistance, GΩ	Range: Resolution: Accuracy:	50.00-99.99 0.01 ±(20% of setting +5 counts)	Delay Timer, second	Range: Resolution: Accuracy:	0.5 - 999.9 0.1 ± (0.1% + 0.05 sec)
	Range: Resolution: Accuracy:	100.0-200.0 0.1 ±(30% of setting +5 counts)	Charge-LO, current, µA	0.000 - 3.500 or Auto Set	
CONTINUITY TEST MODE (All Models)					
Output Current, DC	1 A for 0.000 – 1,000 Ω, 0.1 A for 1.01 – 10.00 Ω 0.01 A for 10.01 – 100 Ω, 0.001 A for 101 – 1,000 Ω 0.0001 A for 1001 – 10,000 Ω, 1 A is Max				
Resistance Display Max & Min Lmt	Range: Resolution: Accuracy:	0.000 – 1,000 Ω 0.001 Ω ± (1% of setting + 3 counts)			
	Range: Resolution: Accuracy:	1.01 – 10.00 Ω 0.01 Ω ± (1% of setting + 3 counts)			
	Range: Resolution: Accuracy:	10.1 – 100.0 Ω 0.1 Ω ± (1% of setting + 3 counts)			
	Range: Resolution: Accuracy:	101 – 1,000 Ω 1 Ω ± (1% of setting + 3 counts)			
	Range: Resolution: Accuracy:	1,001 – 10,000 Ω 1 Ω ± (1% of setting + 10 counts)			
Dwell Timer	Range:	0, 0.4 – 999.9 sec (0=Continuous)			
Resistance Offset	Range:	0.000 – 10.00 Ω			
GROUND BOND TEST MODE (Models 7804 & 7854 Only)					
Output Voltage (Open Circuit Voltage)	Range: Resolution: Accuracy:	3.00 – 8.00 VAC 0.01 VAC ± (2% of setting + 3 counts) Open Circuit			
Output Current	Range: Resolution: Accuracy:	1.00 – 40.00 A 0.01 A ± (2% of setting + 2 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	Range: Resolution: Accuracy:	0 – 150 mΩ for 30.01 – 40.00 A 0 – 200 mΩ for 10.01 – 30.00 A 0 – 600 mΩ for 1.00 – 10.00 A 1 mΩ ± (2% of setting + 2 counts)			
	Range: Resolution: Accuracy:	0 – 600 mΩ 1 mΩ ± (3% of setting + 3 counts)			
Dwell Timer	Range:	0, 0.5 – 999.9 sec (0=Continuous)			
Milliohm Offset	0 – 200 mΩ				
Voltage Offset	0.0 - 6.0 V				
GENERAL SPECIFICATIONS					
Memory	2,000 steps, 200 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				
SmartGFI®	0, 0.4 – 5.0 mA (0=OFF)				
Dimensions (W x H x D)	16.92" x 3.50" x 15.75" (430 x 88.1 x 400mm)				
Weight	7800: 7804: 7820: 7850: 7854:	45 lbs (20.4 kg) 46.3 lbs (21 kg) 35 lbs (15.9 kg) 35 lbs (15.9 kg) 46.3 lbs (21 kg)			