

Hypot®

Production Line Hipot Testing
at its Finest



Our Hypot® Series raises the bar for production line Hipot testing. Improve traceability with onboard data storage and easily transfer test result data and test settings via convenient front panel USB. Take the guesswork out of your production line with the direct barcode connection to quickly associate products with pre-programmed test files. We've included advanced features like improved security and a touch screen interface that provides custom pop-up prompts displayed before each test step. We've dramatically reduced the weight and footprint of the Hypot® Series to make safety compliance a less strenuous ordeal. Quickly interconnect with the HYAMP® Series to form a complete safety compliance system.



Find the Model that Fits Your Testing Needs



AC Hipot



DC Hipot



Ground Continuity



Insulation Resistance

EN 50191
COMPLIANT

3805	•		•	
3855	•		•	•
3865	•	•	•	•
3870	•	•	•	•

AVAILABLE INTERFACES



USB



RS-232

SAFETY & PRODUCTIVITY FEATURES



SmartGFI®
Automatic operator shock protection



Remote Safety Interlock
Easily disable HV output



Data Transfer
Easily import/export test files and data via USB



Barcode Capability
Direct barcode connection



Multiple Languages
Multi-Language user interface



PLC Remote
Basic PLC relay control



Prompt & Hold
Provides alerts & instructions between tests



Advanced User Security
Customize ID & password protection



Interconnection
Interconnect with HYAMP® to form a complete test system



Ramp-HI®
Reduce ramp time during DC Hipot



Charge-LO®
Confirms proper DUT connection



FailCHEK™
Confirms failure detection



Accredited Cal
Accredited calibration options available



WithStand®
Automation Software



On Board Data Storage
Save up to 1,500 Test Results on-board

INPUT SPECIFICATIONS				
Voltage	100 – 120 VAC / 200 – 240 VAC ± 10% Auto Range			
Frequency	50/60 Hz ± 5%			
Fuse	3.15 A, Fast Blow 250 VAC			
DIELECTRIC WITHSTAND TEST MODE				
Output Rating	3805/3855/ 3865/3870	5 kVA @ 20 mAAC 6 kVA @ 7.5 mADC (3865/3870 only)		
Maximum Limit	3805/3855/ 3865/3870	AC	Range: Resolution:	0.00 – 20.00 mA 0.01 mA
		DC	Range: Resolution: Accuracy:	0 – 7500 µA 1 µA AC and DC ± (2% of setting + 2 counts)
Minimum Limit	3805/3855/ 3865/3870	AC	Range: Resolution:	0.000 – 9.999 mA 0.001 mA
		DC	Range: Resolution: Accuracy:	0.0 – 999.9 µA 0.1µA AC and DC ± (2% of setting + 2 counts)
Arc Detection	Range:	1 – 9 (9 is most sensitive)		
Ground Fault Interrupt	GFI Trip Current: 450 µA max (AC or DC), Fixed			
	HV Shut Down Speed: < 1 msec			
Current Display	3805/3855/ 3865/3870	AC	Range 1: Range 2:	0.000 – 4.000 mA 3.50 – 20.00 mA
		DC	Range 1: Range 2: Range 3:	0.0 µA – 400.0 µA 0.350 mA – 4.000 mA 3.50 mA – 7.50 mA
		Accuracy:		All Ranges ± (2% of reading + 2 counts)
DC Output Ripple	≤ 5% Ripple rms at 6 kVDC @ 7.5 mA Resistive Load			
RAMP-HI Selectable	Range: 0.0 – 7,500 µA, User Selectable			
Charge-LO	0 – 350 µA DC or Auto Set			
Discharge Time	< 50 msec for no load, < 100 msec for capacitive load The maximum capacitive load vs. output voltage: 1µF < 1KV 0.08µF < 4KV 0.75µF < 2KV 0.04µF < 5KV 0.5µF < 3KV 0.015uF < 6KV			
AC Voltage Waveform/ Frequency	Sine Wave, Crest Factor = 1.3 – 1.5			
	Range:	50 or 60 Hz, User Selectable		
Dwell Timer	Range:	AC 0, 0.2-999.9 sec (0=Continuous) DC 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, 1.0 – 999.9 sec, (0=OFF)		
Ground Continuity Current	DC 0.1A ± 0.01 A, fixed			
Ground Continuity Maximum Limit	Range: Resolution: Accuracy:	0.00 – 1.50 Ω 0.01 Ω ± (3% of setting + 0.02 Ω)		
Ground Continuity Auto Offset	Range: Resolution: Accuracy:	0.00 – 0.50 Ω 0.01 Ω ± (3% of setting + 0.02 Ω)		

INSULATION RESISTANCE TEST MODE			
Voltage Setting	Range: Resolution: Accuracy:	30 – 1,000 VDC 1 V ± (2% of setting + 5 V)	
Resistance Display	Range:	1 – 50,000 MΩ	
	Resolution:	30 – 99 VDC 100 – 499 VDC 500 – 1000 VDC	
	MΩ MΩ MΩ MΩ		
	0.001 1.000 – 1.999 1.000 – 1.999 1.000 – 9.999		
	0.01 2.00 – 19.99 2.00 – 19.99 10.00 – 99.99		
	0.1 20.0 – 199.9 20.0 – 199.9 100.0 – 999.9		
	1 200 – 10,000 200 – 20,000 1000 – 50000		
	Accuracy:	± (8% of reading+2 counts) at test voltage 30 – 499 V and 1.00–999.9 MΩ	
	At test voltage 500-1000 V ± (2% of reading + 2 counts) for 1.00 – 999.9 MΩ ± (5% of reading + 2 counts) for 1000 – 9999 MΩ ± (15% of reading + 2 counts) for 10000 – 50,000 MΩ		
HI & LO-Limit	Range: Resolution:	0, 1.00 – 99.99 MΩ (0=OFF, HI-Limit ONLY) 0.01 MΩ 1000-50000 1 MΩ	
	Range: Resolution:	100.0 – 999.9 MΩ 0.1 MΩ	
	Accuracy:	At test voltage 500-1000 V ± (2% of setting + 2 counts) for 1.00 – 999.9 MΩ ± (5% of setting + 2 counts) for 1000 – 9999 MΩ ± (15% of setting + 2 counts) for 10000 – 50,000 MΩ	
Charge-LO	Range:	0.000 – 3.500 µA DC or Auto Set	
Ramp Timer	Range:	Ramp-Up: 0.1 – 999.9 sec Ramp-Down: 0, 1.0 – 999.9 sec, (0=OFF)	
Delay Timer	Range:	0.5 – 999.9 sec (0=OFF)	
Dwell Timer	Range:	0, 0.5 – 999.9 sec (0=continuous)	
GENERAL SPECIFICATIONS			
Remote Control and Signal I/O	Inputs: Test, Reset, Hardware Interlock, File Recall Outputs: Pass, Fail, Test-in-Process, Reset-Out, Start-Out		
Vmax	Displays the maximum voltage value recorded during a breakdown		
Imax	Displays the maximum leakage current value read during a test		
Memories	50 steps 1500 test results		
Interface	USB standard		
Language	English, Traditional Chinese, Simplified Chinese, Turkish, Portuguese, Spanish, German, French		
Security	Multiple user setups with ID and password		
Dimensions (W x H x D)	3805/3855/ 3865/3870	8.5" x 3.5" x 11.9" (215 mm x 88.1 mm x 300 mm)	
Weight	3805/3855/ 3865/3870	12 lbs (5.46 kgs)	

Why We Use Counts

Associated Research publishes some specifications using "counts" which allows us to provide a better indication of the instrument's capabilities across measurement ranges. A count refers to the lowest resolution of the display for a given measurement range. For example, if the resolution for voltage is 1V then 2 counts = 2 V.

Specifications subject to change without notice.