

# Hypot®

Production Line Hipot Testing  
at its Finest



Our new Hypot® Series raises the bar for production line Hipot testing. Improve traceability with on-board 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



NEW 2017	3805	•		•	•
NEW 2017	3865	•	•	•	•
NEW 2017	3870	•	•	•	•
NEW 2017	3880*	500 VA*	•		

\*Meets 200 mA short circuit requirements

## AVAILABLE INTERFACES



USB

## 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



**My Menu**  
Customize your own shortcut menu



**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 15 A, Fast Blow 250 VAC (3880 only)		
DIELECTRIC WITHSTAND TEST MODE			
Output Rating	3805/3865/3870	5 kVA @ 20 mAAC 6 kVA @ 7.5 mADC (3865/3870 only)	
	3880	5 kVA @ 100mAAC	
Maximum Limit	3805/3865/3870	AC	Range: 0.00 – 20.00 mA Resolution: 0.01 mA
		DC	Range: 0 – 7500 µA Resolution: 1 µA Accuracy: AC and DC ± (2% of setting + 2 counts)
	3880	AC	Range: 0.00 – 99.99 mA Resolution: 0.01 mA Accuracy: ± (2% of setting + 6 counts)
		DC	Range: 0.000 – 9.999 mA Resolution: 0.001 mA
Minimum Limit	3805/3865/3870	AC	Range: 0.000 – 9.999 mA Resolution: 0.001 mA
		DC	Range: 0.0 – 999.9 µA Resolution: 0.1µA Accuracy: AC and DC ± (2% of setting + 2 counts)
	3880	AC	Range: 0.000 – 9.999 mA Resolution: 0.001 mA Accuracy: ± (2% of setting + 6 counts)
		DC	Range: 0.000 – 9.999 mA Resolution: 0.001 mA Accuracy: ± (2% of setting + 6 counts)
Arc Detection	Range:	1-9, ON/OFF Select	
Ground Fault Interrupt	GFI Trip Current: 450 µA max (AC or DC), Fixed		
	HV Shut Down Speed: < 1 msec		
Current Display	3805/3865/3870	AC	Range 1: 0.000 – 4.000 mA Range 2: 3.50 – 20.00 mA
		DC	Range 1: 0.0 µA – 400.0 µA Range 2: 0.350 mA – 4.000 mA Range 3: 3.50 mA – 7.50 mA
	3880	AC	Range 1: 0.000 – 4.000 mA ± (2% of reading + 2 counts) Range 2: 3.50 – 99.99 mA ± (2% of reading + 6 counts)
		DC	Range 1: 0.000 – 4.000 mA ± (2% of reading + 2 counts) Range 2: 3.50 – 99.99 mA ± (2% of reading + 6 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 <b>The maximum capacitive load vs. output voltage:</b> 1µF < 1KV    0.08µF < 4KV 0.75µF < 2KV    0.04µF < 5KV 0.5µF < 3KV    0.015µF < 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		

DIELECTRIC WITHSTAND TEST MODE CONTINUED				
Ground Continuity Maximum Limit Minimum Limit	Range:	0.00 – 1.50 Ω		
	Resolution:	0.01 Ω		
	Accuracy:	± (3% of setting + 0.02 Ω)		
Ground Continuity Auto Offset	Range:	0.00 – 0.50 Ω		
	Resolution:	0.01 Ω		
	Accuracy:	± (3% of setting + 0.02 Ω)		
Short Circuit Current	> 200 mA (3880 only)			
INSULATION RESISTANCE TEST MODE				
Voltage Setting	Range:	30 – 1,000 VDC		
	Resolution:	1 V		
	Accuracy:	± (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:	0, 1.00 – 99.99 MΩ (0=OFF, HI-Limit ONLY)		
	Resolution:	0.01 MΩ 1000-50000 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		
	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		
	Resolution:	0.1 MΩ		
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)	8.5" x 3.5" x 11.9" (215 mm x 88.1 mm x 300 mm)			
	16.93" x 5.20" x 11.84" (430 mm x 132 mm x 300 mm)			
Weight	12 lbs (5.46 kgs) 50 lbs (23 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.