HypotMAX®

The Safest and Most Reliable Automated High Voltage Hipot Instrument Available

Our HypotMAX® Series is a complete line of automated Hipot instruments designed to meet the demanding requirements of high voltage applications. We've included our patented SmartGFI® feature for maximum operator safety as well as a variety of advanced features to increase productivity on the production line and in the lab. Set up and run tests with confidence from our intuitive user interface or automate with a PC.

AVAILABLE INTERFACES

USB

RS-232

GPIB (Optional)

SAFETY & PRODUCTIVITY FEATURES

SmartGFI® Automatic operator shock protection

Remote Safety Interlock Easily disable HV output

PLC Remote Basic PLC relay control

Ramp-HI® Reduce ramp time during DC Hipot

Charge-LO® Confirms proper DUT connection

Arc Detection High frequency filter for corona detection

Accredited Cal Accredited calibration options available

Autoware® Use with automation software control

Find the Model that Fits Your Testing Needs

	AC Hipot	DC Hipot
7705	•	
7710		•
7715	•	
7720		•

INPUT SPECIFICATIONS	
Voltage	115/130 VAC ± 10%, Single Phase, User Selection
Frequency	50/60 Hz ± 5%
Fuse	6.3 A, 250 V Slow Blow

DIELECTRIC WITHSTAND TEST MODE			
Output Rating	7705: 10 kV @ 20 mAAC 7710: 12 kV @ 10 mADC 7715: 20 kV @ 10 mAAC 7720: 20 kV @ 5 mADC		
HI-Limit and LO-Limit	7705	Range 1: Resolution: Range 2: Resolution:	0.0 – 9.999 mA 0.001 mA 10.00 – 20.00 mA 0.01 mA
	7710	Range 1: Resolution: Range 2: Resolution:	0.00 – 999.9 µA 0.1 uA 1,000 – 9,999 µA 1 µA
	7715	Range: Resolution:	0.00 – 9.999 mA 0.001 mA
	7720	Range 1: Resolution: Range 2: Resolution:	0.0 – 999.9 µA 0.1 µA 1,000 – 5,000 µA 1 µA/step
	77XX	Accuracy:	± (2% of setting + 2 counts)
DC Ramp HI	7710	13 mA peak maximum, 10 mADC, ON/OFF selectable	
	7720	6.75 mA peak maximum, 5 mADC, ON/OFF selectable	
DC Charge LO	7710/7720	Range:	0.0 – 350 µADC or auto set
Arc Detection	7705	1 – 9 at output voltage < 7.00 kV 1 – 8 at output voltage ≥ 7.00 kV	
	7710/7720	1 – 9	
	7715	1 – 9 at output voltage < 15.00 kV 1 – 7 at output voltage ≥ 15.00 kV	
Voltage Display	7705	Range: Accuracy:	0.00 – 10.00 kV Full scale ± (2% of reading + 20 V)
	7710	Range: Accuracy:	0.00 – 12.00 kV Full scale ± (2% of reading + 20 V)
	7715/7720	Range: Accuracy:	0.00 – 20.00 kV Full scale ± (2% of reading + 20 V)
Current Display	7705	Auto Range Range 1: Range 2:	 0.000 – 3.500 mA 3.00 – 20.00 mA
	7710	Auto Range Range 1: Range 2: Range 3:	 0.0 – 350.0 µA 300 – 3500 µA 3,000 – 9,999 µA
	7715	Auto Range Range 1: Range 2:	 0.000 – 3.500 mA 3.00 – 10.00 mA
	7720	Auto Range Range 1: Range 2:	 0.0 – 350.0 µA 300 – 5,000 µA
DC Output Ripple	7710	< 5% Ripple at 12 kV @ 9,999 µA, Resistive Load	
	7720	< 5% Ripple at 20 kV @ 4,999 µA, Resistive Load	
AC Output Waveform	Sine Wave, Crest Factor = 1.3 – 1.5		
Output Frequency	Range:	50/60 Hz, User Selection ± (1% of output + 5 V) from Regulation No load to full load	
Output Regulation	± (1% of output + 10 V) from no load to full load		
Discharge Timer	7710	No load < 400 ms	
	7720	No load < 500 ms	
Dwell Timer	Range: AC Range: DC Range:	0, 0.3 – 999.9 sec (0=Continuous) 0, 0.3 – 999.9 sec or min (0=Continuous) 0, 0.4 – 999.9 sec or min (0=Continuous)	
Ramp Timer	7705/7715	Range:	0.3 – 999.9 sec
	7710/7720	Range:	0.4 – 999.9 sec
Ground Continuity	Max. Ground Resistance 1 Ω ± 0.1 Ω, fixed		

DIELECTRIC WITHSTAND TEST MODE	
Ground Fault Interrupt	HV Shut Down Speed < 1 ms GFI Trip Current 1 mA max

GENERAL SPECIFICATIONS		
Memory	50 memories w/ 8 steps per memory	
Mechanical	Tilt-up front feet	
Interface	Standard: USB, RS-232 Optional: GPIB	
Dimensions (W x H x D)	16.93" x 5.24" x 15.75" (430 x 133 x 400 mm)	
Weight	7705/7710: 7710/7720:	61.65 lbs (28 kg) 48.9 lbs (22 kg)

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.