

Modular DC Hipots

100-600 kV

Testing Applications

Perform precise DC hipot testing of electrical switchgear, cables, motors, generators, and protective equipment

- **Lightweight** and **rugged** for ease of **mobility**
- **Expandable**
- **Air insulated** design

Description

Phenix Technologies offers Modular DC Hipots with 1 to 6 stackable modules mounted on a mobile base that will generate a DC voltage in increments of 100 kV DC up to 600 kV DC.

Each module is rated for 5 mA and is air insulated. Cooling AN (Air-Natural, Convection). Both models offer reversible polarity.

Each model consists of a base with casters, corona rings, a control cabinet, a regulator cabinet, and the required number of modules to reach the desired voltage.

Models Available

- 4100-5ST-100
- 4200-5ST-100
- 4300-5ST-100
- 4400-5ST-100
- 4500-5ST-100
- 4600-5ST-100



Model 4500-5ST-100



Safety and Design Features

- Stackable modules utilizing unique spring loaded contact design
- No wires between modules
- Expandable from 100 kV DC to 600 kV DC
- Reversible polarity
- Zero Start interlock
- External interlock provision
- Motorized control of output voltage
- Multi-range digital metering
- Guard circuit to eliminate stray leakage current from specimen under test
- Ripple <5%
- Operation/maintenance manual

Options

- Input power cable (length and receptacle required to be specified)
- Computerized controls
- Discharge device
- HV series resistor
- Ground stick
- Discharge stick
- Reusable shipping containers



Controls and Metering

Phenix Technologies uses the latest development in computer-assisted controls. Our configuration creates ease in setup and simplicity in testing. The test system features a large 10" full color touch screen liquid crystal display and Ethernet port to select automation modes through a remote personal computer interface.

Environmental Conditions

- 10-40°C, indoor/outdoor in fair weather
- Humidity <95% non-condensing
- Altitude <3300 ft (1000 meters)



Ground Stick

Model GS100-2 Ground Stick, 2-piece design, with a 25' (8 m) ground lead



Discharge Stick

Model DS100-2 Discharge Stick (100 kV, 100 kΩ, 50 kJ), 2-piece design, with a 25' (8 m) ground lead

Modular DC Hipots 100-600 kV

	MODEL	4100-5ST-100	4200-5ST-100	4300-5ST-100	4400-5ST-100	4500-5ST-100	4600-5ST-100
INPUT	Voltage / Current	208-240 V, 2.75 A	208-240 V, 5.5 A	208-240 V, 8.25 A	208-240 V, 11 A	208-240 V, 13.75 A	208-240 V, 16.5 A
	Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
DC OUTPUT	Power	500 W	1000 W	1500 W	2000 W	2500 W	3000 W
	Voltage / Current	100 kV, 5 mA	200 kV, 5 mA	300 kV, 5 mA	400 kV, 5 mA	500 kV, 5 mA	600 kV, 5 mA
	Ripple	<5%					
	Polarity	reversible					
DUTY CYCLE	Capacitive Loads	30 minutes ON / 60 minutes OFF at full rated output					
	Resistive Loads	5 minutes ON / 15 minutes OFF at full rated output					
DIGITAL METERING	Accuracy	+/- (0.8% of reading +0.2% of range +LSD)					
	Voltmeter Range(s)	0-100 kV	0-200 kV	0-300 kV	0-400 kV	0-500 kV	0-600 kV
	Currentmeter Range(s)	199.99 μ A / 1.9999 mA / 5.000 mA (Guarded Return) 5.000 mA (Grounded Return)					

	Controls	Single 100 kV HV Module	Regulator	Base	
DIMENSIONS & WEIGHTS	Length	21" (533 mm)	17" (432 mm)	24" (610 mm)	56" (1422 mm)
	Width	18" (457 mm)	17" (432 mm)	20" (508 mm)	56" (1422 mm)
	Height	12" (305 mm)	27" (686 mm)	20" (508 mm)	12" (305 mm)
	Weight	40 lbs (18 kgs)	110 lbs (50 kgs)	175 lbs (79 kgs)	100 lbs (45 kgs)

Cables Included

Input Power Cable optional	
Power Interconnect	50' (15 m)
Meter Interconnect	50' (15 m)
Control Interconnect	50' (15 m)



PHENIX Technologies is committed to providing leadership, innovation, technology, quality, and service in all areas of our business.

Our 85,000 square-foot headquarters is a modern manufacturing facility. All aspects of electrical, mechanical, and software design and production are performed in this facility. Our engineers offer a unique blend of theoretical knowledge and practical experience. Our Service and Calibration Department assists customers during and after installation to ensure years of trouble free service.

We carry our commitment into the future as we proudly continue to provide the best in **high voltage, high current, high power test systems and components.**



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