

# DC POWER SUPPLIES

# High Voltage DC Power Supplies

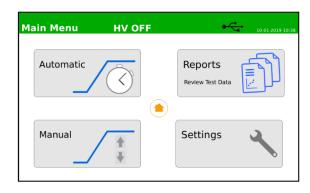
HIPOTRONICS high power ranges of supplies are either air or oil insulated. There are numerous protection features provided in these power supplies including input and backup breakers, user defined overload and overvoltage settings, fast overload sensor, zero-start interlock plus provision for external safety interlock, current-limiting resistor in output circuit, output shorting solenoid (and/or stiff resistive bleeders), and fuse or circuit breaker protection of controls.

Rated current is available from zero to maximum voltage. All power supplies feature solid-state rectifiers, meter calibration, surge/transient protection of meters, relays, and voltage regulators. Controls include optional meter polarity-reversing output button in addition to input power and overload circuits.

DC Power Supplies are available in a wide range of voltage (1kV to 200kV) and power ratings (1kW to 25kW) with exceptional reliability, durability, and functionality. For higher ratings, consult factory.

No matter your test requirements, HIPOTRONICS has highly reliable test solutions to meet your testing needs.





#### **FEATURES**

- Continuously adjustable test voltage from 0.5% to 100% of rated voltage
- Microprocessor controller provides better regulation accuracy and measuring accuracy
- ☑ Shielded output cable
- ☑ Adjustable Overload from 0% to 110% of rated current output
- ☑ Backup Breaker overload safety situation
- ☑ **Zero start interlock** ensures that the voltage control is at zero before HV can be energized
- Shorting solenoid grounds output cable and object under test

# **BENEFITS**

- ☑ **Simple to Use** minimal amount of setup time and simple control panel allows simple testing
- Operator Safety the power supply and test object are automatically grounded when high voltage is turned off
- Output Connected Meters allows for fast accurate readings
- Shielded Coaxial Output Cable allows for easy connection to test object

## **APPLICATIONS**

- ☑ Accelerators
- ☑ X-Ray Systems
- ☑ DC Transmission Line Components
- ☑ High Voltage Power Sources



#### **TECHNICAL SPECIFICATIONS**

Output Voltage	Up to 200kV		
Output Power	Up to 25kW		
Output Polarity	Positive or Negative output in respect to ground*		
Voltage Metering Accuracy	±1.5% of reading ± 0.2% of full scale		
Regulation	Between 10% to 18% No Load to Full Load **		
Ripple	Between 2% rms and 5% rms ***		
Ramp Rate Accuracy	+/- 5%		
Measurement Resolution	0.01kV, 0.01mA		
Step Resolution	0.5% of Full Scale		
Partial Discharge Rating	Available for certain models. Consult Factory		
Input Frequency	50/60Hz		
Input Voltage	115V – 480V, 1Ф or 3Ф ****		
Duty Cycle	Continuous		
Languages	English, French German, Mandarin, Spanish, Portuguese		
ECCN: 3A992.A	HTS US: 9030.39.0100		

Notes: Higher output rating combinations available. Consult Factory with your testing requirements.

<sup>\*\*\*\*</sup> Input voltage and configuration dependent on system's power rating. Consult Factory.

	Electronic Components		High Voltage Components	
	Temperature	Humidity (r.h. non-condensing)	Temperature	Humidity (r.h. non-condensing)
Operation	+5°C +40°C	5 95%	-10°C +45°C	5 90%
Storage	-20°C +70°C	5 95%	-10°C +55°C	5 90%

## **SCOPE OF SUPPLY**

Embedded controller

All-in-one cabinet or separate regulator and HV transformer

HV warning lamp

Manual and Test Report

# **CUSTOMER SUPPLIED**

Input/output regulator power cables (if applicable)

High voltage output connection to test object

Grounding materials

## **STANDARD OPTIONS**

HHDA13-280 – 120kV rated grounding stick

**DI-REM-SFTW** – Remote control Software with external E-stop button

DI-FO - Fiber optic connection to computer (customer supplied)

**GND Braid** – Grounding material

HH-800-HS - Hand operated interlock switch

HH-800-FS - Foot operated interlock switch

Casters – Set of casters for regulator & HV tank (if applicable)

<sup>\*</sup> Reversible Polarity option available for certain models. Consult Factory.

<sup>\*\*</sup> Value dependent on voltage and power rating.

<sup>\*\*\*</sup> Value dependent on voltage and power rating. 1% rms ripple option available in certain models.