HITEK POWER MH60 SERIES

VERSATILE HIGH VOLTAGE POWER SUPPLIES

The HiTek Power® MH60 series of versatile high voltage power supplies are suitable for specification in OEM equipment. Powered from 24 VDC, they supply up to 60 W output and allow full range control and monitoring of output voltage and current. Custom versions can be produced for specific requirements.

PRODUCT HIGHLIGHTS

- 60 W output power
- High reliability
- 24 VDC powered
- Range of outputs available
- Positive or negative polarity
- Short circuit and flashover protection
- Remotely controllable
- V and I control
- V and I monitor
- LED status indication
- Low ripple
- EU RoHS compliant to 2002/95/EC marked for EU LV Directive 73/23/EEC

TYPICAL APPLICATIONS

- Wide angle, high definition CRTs
- X-ray equipment
- Insulation and materials testing
- Projection

ELECTRICAL SPECIFICATIONS

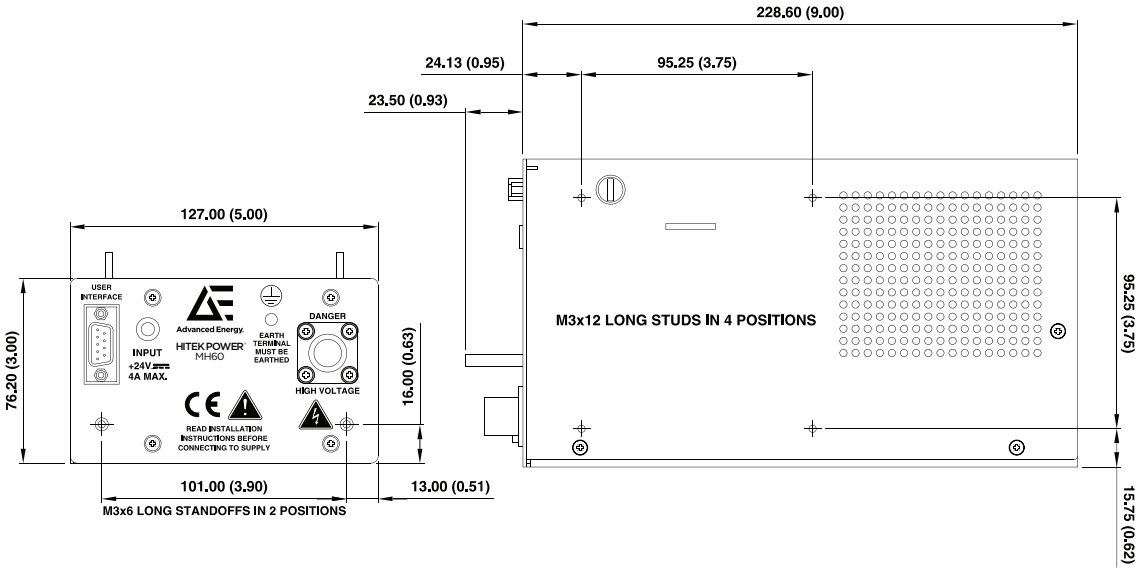
Parameters	Specifications
Output Power	60 W max
Output Voltage	0 to 50 kV depending on model
Output Current	0 to 2 mA depending on model
Input Voltage	+24 VDC (±10%)
Input Current	4 A max
Polarity	Positive or negative to order
Ripple	< 0.05% +10 V peak to peak
Voltage Regulation	Line: < 0.01% for a 10% change in input voltage
	Load: < 0.01% ±1 V no load to full load
Current Regulation	Line: < 0.01% for a 10% change in input voltage
	Load: < 0.01% ±1 µA for a 50% voltage change
Voltage Control	0 to 10 V for 0 to 50 kV accuracy 0.25% ±10 V
Current Control	0 to 10 V for 0 to 1.2 mA accuracy 0.25% ±1 µA
Monitors	Voltage: 0 to 10 V ±0.25% ±5 mV for 0 to 50 kV
	Current: 0 to 10 V ±0.25% ±5 mV for 0 to 1.2 mA
	Each monitor has a series output resistor of 1 kΩ
Temperature Coefficent	100 ppm/°C over operating temperature range
	Applies to voltage control, voltage monitor and current monitor
Stability	±0.1% over an 8 h period after 30 min warmup
Operating Temperature	0 to +45°C
Storage Temperature	-20°C to +60°C
Humidity	85% max relative humidity non-condensing
Altitude	Sea level to 2000 m (6500')
Installation Category	1 (BS EN61010-1)
Pollution Degree	2 (BS EN61010-1)
Control	The power supply is operated via the 9-way, D-type connector situated on the rear panel. Full control and monitoring functions are available by this method.
Cooling	Free convection (no fan)
Protection	The units are fully protected against flashover and continuous short circuit (no trip).
EMC	The MH60 series is intended for installation as a component of a system. Basic EMC filtering is provided.
Safety	The MH60 series meets the requirements of the Low Voltage Directive (LVD), 2006/95/EC, by complying with BS EN61010 when it is installed as a component part of compliant equipment. It is CE marked accordingly.
RoHS	The MH60 series meets the requirements of EU Directive 2002/95/EC on the Restriction of use of certain Hazardous Substances in electrical and electronic equipment (RoHS).

MECHANICAL SPECIFICATIONS

Dimensions	
Dimensions	See outline drawing

Weight	
Weight	3 kg (6.6 lb)

Construction	
Casing	Aluminium, clear non-chrome passivate finish



Drawing dimensions are in mm (inches).

INTERFACE

Connections	
Input DC	2 x ¼" space terminals
Safety Earth	M5 stud
HV Output	50 kV unit has 'poke home' connector
Control interface via a 9-way, female D-type connector	SIGNAL GROUND 0 V (1) HV ON/OFF (2) VOLTAGE PROGRAM (3) VOLTAGE MONITOR (4) CURRENT PROGRAM (5) CURRENT MONITOR (6) INTERLOCK INPUT (7) INTERLOCK MONITOR (8) +10 V REFERENCE (9)

ORDERING INFORMATION

For ordering information and to find a solution for your exact requirements, please contact your local Advanced Energy sales representative.

ABOUT ADVANCED ENERGY

Since 1981, Advanced Energy (AE) has perfected how power performs for its customers. For both end users and OEMs, AE's comprehensive portfolio of standard and custom high voltage components precisely match system specifications to deliver unparalleled energy, quality, and performance. Through close customer collaboration, design expertise, application insight, and world-class support, AE creates successful partnerships and enables customers to push the boundaries of innovation and stay ahead of evolving market needs.

PRECISION | POWER | PERFORMANCE

CAUTION:
High Voltage

Read and understand all documentation before you install, operate, or maintain Advanced Energy high voltage power supplies. Follow all safety instructions and precautions to protect against property damage and serious or possibly fatal bodily injury. Never defeat safety interlocks or grounds.

Advanced Energy

For international contact information, visit advanced-energy.com.

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CE

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