

# EH Series 100 Watt Regulated High Voltage DC Power Supplies

## Laboratory Performance...

## Enhanced Features...

## Economical Price

Fully compliant with the European harmonized EMI directive, EN50082-2, and with the low voltage (safety) directive, 73/23/EEC.

Line harmonics are within the European harmonized standard, EN61000-3-2 specifications.



Models from 0-1 kV DC through 0-60 kV DC.

The EH Series was designed for the user who requires premium performance coupled with "application flexible" features. The result...high voltage power supplies of superior quality...at an affordable price. Replete with standard features, there are no hidden extras.

### Features:

**Unique "True Load Monitor"** enables the load current to be monitored accurately with respect to ground. This eliminates the need to break the common/ground connection, and/or to program the output with an isolated source.

**Low Ripple.** Better than 0.03% at full load.

**Air Insulated.** As in all standard Glassman power supplies these units employ "air" as the dielectric medium. No oil or encapsulation to impede serviceability or increase weight

**Low Stored Energy.** Less than 800 millijoules for most models.

**Constant Voltage Constant Current Operation.** Automatic crossover from voltage or current regulated mode dependent on the load conditions.

**Tight Regulation.** Voltage regulation better than 0.005% line and load; current regulation better than 0.05% from short circuit to rated voltage.

**Fast Transient Response.** Less than 3 milliseconds for a 50% load transient.

**Front Panel Elements Include:** Ten turn voltage and current controls with locking vernier dials, accurate 2 1/2" analog displays both voltage and current, illuminated AC power on/off switch.

**Remote Control Facilities Include:** Output voltage and current program/monitor terminals, high voltage enable/disable, safety interlock terminals, and + 10 volt reference source.

**Warranty.** Standard power supplies are warranted for three years; OEM and modified power supplies are warranted for one year. A formal warranty statement is available.



Designing Solutions for High Voltage Power Supply Applications

## GLASSMAN HIGH VOLTAGE INC.

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## Specifications

(From 5% to 100% rated voltage. All units operate down to zero output with very slight degradation of performance.)

**Input:** 105-125V RMS 48-420 Hz, single phase, less than 1.5 amperes. Input connector per IEC 320 with mating line cord provided.

**Efficiency:** Better than 75% at full load.

**Output:** Continuous, stable adjustment, from 0 to rated voltage or current by panel mounted 10-turn potentiometers with 0.05% resolution, or by external 0 to 10V signals is provided. Linearity is <1% of rated. Accuracy is 1% of rated + 1% of setting. Repeatability is <0.1% of rated.

**Stored Energy:** 10kV model, 200 millijoules; 50kV model, 1 joule.

**Voltage Regulation:** Better than 0.005% +1mV/mA, line and load.

**Ripple:** Better than 0.03% RMS of rated voltage +0.5V at full load.

**Current Regulation:** Better than 0.05% from short circuit to rated voltage at any set current condition.

**Voltage Monitor:** Zero to +10V DC signal is equivalent to zero to rated voltage. Accuracy, 1% of rated voltage.

**Current Monitor:** Zero to +10V DC signal is equivalent to zero to rated current. Accuracy, 1% of reading +0.05% of rated current (Reversible models 1% of reading +0.1% of rated).

**Stability:** 0.01% per hour, after 1/2 hour warm-up, 0.05% per 8 hours.

**Voltage Rise/Decay Time Constant:** Using either the HV (on/off) or remote voltage control, with a 75% resistive load, the output voltage will rise or decay with a typical time constant of 60 milliseconds (100mS maximum).

**Temperature Coefficient:** 0.01% per degree C.

**Ambient Temperature:** -20 to +60 degrees C, operating; -40 to +85 degrees C, storage.

**Polarity:** Available with either positive, negative, or reversible polarity with respect to chassis ground.

**Protection:** Automatic current regulation protects the power supply against all overload conditions, including arcs and short circuits. Fuses, surge limiting resistors, and low energy components provide the ultimate protection.

**Accessories:** Detachable 8 foot shielded high voltage coaxial cable (see Models chart for cable type) and 6 foot detachable line cord are provided.

**Remote Controls:** Common, +10 volt reference, interlock, current monitor, current program, voltage monitor, voltage program, HV enable/disable, and ground provided on a rear panel terminal block.

**External Interlock:** Open off, close on.

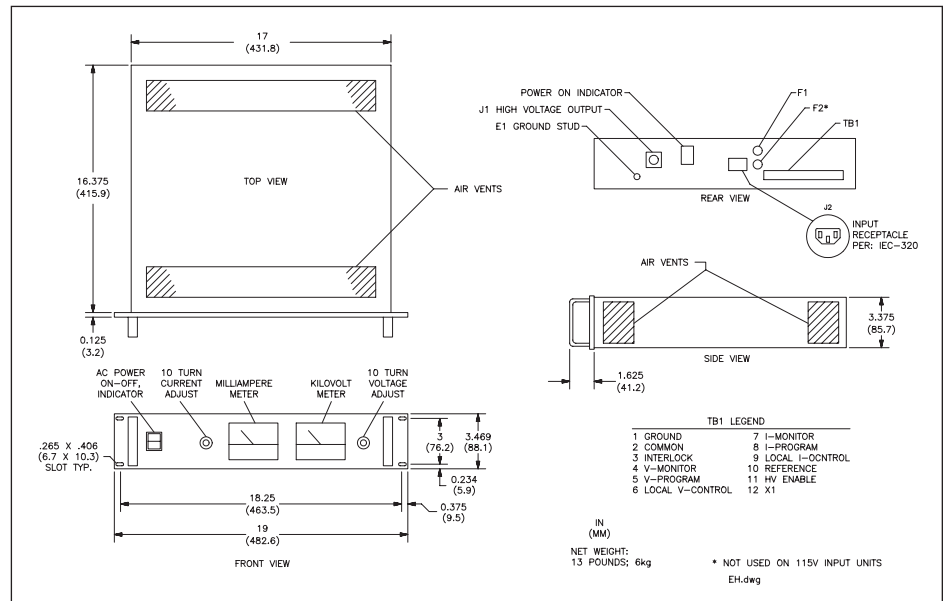
**HV Enable/Disable:** 0-1.5V off, 2.5-15V on.

## Options

Symbol	Description
100	Rated for 90 to 110 volts RMS. 48-420 Hz.
220	Rated for 210 to 250 volts RMS. 48-420 Hz.
CT	Current trip. Power supply trips off when the load current reaches the programmed level. This option has a rear panel switch that selects either "trip" operation or current limiting.
DM	3-1/2 digit LCD panel meters.
5VC	0-5 V voltage and current program/monitor.

## Models

Positive Polarity	Negative Polarity	Reversible Polarity	Output Voltage	Output Current	Output Cable
EH1P100L	EH1N100L	EH1R100L	0-1kV	0-100mA	RG-59
EH1.5P65L	EH1.5N65L	EH1.5R65L	0-1.5kV	0-65mA	RG-59
EH2P50L	EH2N50L	EH2R50L	0-2kV	0-50mA	RG-59
EH3P33L	EH3N33L	EH3R33L	0-3kV	0-33mA	RG-59
EH5P20L	EH5N20L	EH5R20L	0-5kV	0-20mA	RG-59
EH10P10	EH10N10	EH10R10	0-10kV	0-10mA	RG-8U
EH15P6	EH15N6	EH15R6	0-15kV	0-6mA	RG-8U
EH20P5	EH20N5	EH20R5	0-20kV	0-5mA	RG-8U
EH25P4	EH25N4	EH25R4	0-25kV	0-4mA	RG-8U
EH30P3	EH30N3	EH30R3	0-30kV	0-3mA	RG-8U
EH40P2.5	EH40N2.5	EH40R2.5	0-40kV	0-2.5mA	RG-8U
EH50P2	EH50N2	EH50R2	0-50kV	0-2mA	RG-8U
EH60P1.5	EH60N1.5	EH60R1.5	0-60kV	0-1.5mA	RG-8U



Net Weight: 13 lbs.



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