

MJ Series 15 Watt Regulated High Voltage DC Modules

**Premium
Performance...
Low Cost**

**Small Size
and Weight**

**Fully RoHS
Compliant**

The MJ Series of 15 watt high voltage supplies are air insulated, fast response units, with tight regulation and low arc discharge currents

Please refer to Technology > Applications page on our web site for typical applications.

The MJ Series models, ordered with 230 VAC nominal input, are fully compliant with the Following European Directives:

EN61000-3-2, Line Harmonics.
EN61010/ IEC61010, Safety.
EN61000-6-4, Conducted and Radiated Emissions.
EN61000-6-2:2005, Conducted and Radiated Immunity
2011/65/EU, Restriction of the use of Hazardous Substances (RoHS)

CE (Meets all applicable directives), UKCA
(Meets all applicable legislation)



Models from 0-3kVDC through 0-30kVDC; weight < 7.5 lbs.

Features:

Current Regulation Unequaled in a Module of This Price Range.

For example, the regulation from short circuit to rated voltage for the 15 kV, 1 mA model is ± 500 nanoamperes.

Glassman's "Air Insulated" designs are completely serviceable; this module is not an epoxy block "throw away".

AC Input: Eliminates the need, and expense of an auxiliary DC power source.

Standard Accessories: Detachable 8' shielded output cable, and mating control connector.

Constant Voltage/Current Operation - Standard

Low Stored Energy: Less than 200 millijoules for most models.

"Multi-Mode" operation permits maximum user flexibility.

- Local voltage or current control, user selectable.
- Remote voltage and/or current control via 0 - +10 volt signal.
- Remote voltage and/or current control via potentiometers.

Protection: Overload, short circuit, and arc protection is provided by automatic current regulation and by careful surge limiting design.

External Interlock Terminals

TTL Enable/Disable

Warranty. All power supplies are warranted for one year. A formal warranty statement is available.

Specifications

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

Input: 105-125V RMS or 210-250V RMS (must be specified when ordering), 48-63Hz single phase, 0.25 amperes. 3 position terminal block with cover provided. 400Hz input available. (DC input available for quantity orders - contact factory)

Output: Continuous, stable adjustment, from 0 to rated voltage or current by panel mounted 10-turn potentiometer with 0.05% resolution, or by external 0 to 10V signals is provided. Voltage accuracy is 1% of setting + 0.5% of rated. Repeatability is <0.1% of rated.

Stored Energy: 15kV model, < 200 millijoules; 30kV model, < 400 millijoules.

Voltage Regulation: Better than 0.005% line and load.

Ripple: < 0.05% RMS of rated voltage at full load. Ripple is proportional to load and decreases linearly to approximately 0.01% at no load.

Current Regulation: Better than 0.1% from short circuit to rated voltage at any load condition.

Voltage Monitor: Zero to + 10V DC signal is provided for zero to rated voltage. Accuracy is 1% of reading + 0.5% of rated. Output impedance is 10 K.

Current Monitor: Zero to +10V DC signal is provided for zero to rated current. Accuracy, 1% of reading +0.05% of rated. Output impedance is 10 K.

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 50% load, the output voltage will rise or decay with a typical time constant of 50 milliseconds (100 mS maximum).

Temperature Coefficient: 0.01% per degree C.

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

Polarity: Available with either positive or negative 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.

Output Cable: Detachable, 8 foot. RG8U shielded high voltage coaxial cable is provided.

Controls: A DB15S D-subminiature connector, and mating plug, is provided for all control input functions. These include common, + 10 volt

reference, interlock, current monitor, current program, voltage monitor, voltage program, TTL, ground, and local control.

External Interlock: Open off, closed on.

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

Models:

Positive Polarity	Negative Polarity	Output Voltage	Output Current	Output Cable	Case Size
MJ3P5000	MJ3N5000	0-3 kV	0-5 mA	RG-8U	A
MJ5P3000	MJ5N3000	0-5 kV	0-3 mA	RG-8U	A
MJ10P1500	MJ10N1500	0-10 kV	0-1.5 mA	RG-8U	A
MJ15P1000	MJ15N1000	0-15 kV	0-1 mA	RG-8U	A
MJ20P700	MJ20N700	0-20 kV	0-0.7 mA	RG-8U	B
MJ30P400	MJ30N400	0-30 kV	0-0.4 mA	RG-8U	B

