



- **Compact Package**
- **Voltage and Current Programming from Zero to Rated Output**
- **Test Points for Output Current and Voltage**
- **Control of Output Via Enable/Inhibit Signal**
- **OEM Customization Available**

www.spellmanhv.com/manuals/EPM

The EPM series of high voltage power supplies provides very well regulated, low ripple high voltage in a highly efficient, compact design.

The output voltage and current are controllable over the full range of operation. Voltage and current programming and monitoring signals are all 0-10Vdc where corresponds to 0 to 100% rated output. A High Voltage Inhibit/Enable signal allows for simple on/off control of the power supply.

TYPICAL APPLICATIONS

Electrophoresis	Photomultipliers
Electron Beam	Laboratory Applications
Ion Source	Electrospinning

SPECIFICATIONS

Input:

+24Vdc \pm 10% @ 2A

Output:

8 models from 1kV to 30kV. Each model is available in positive or negative polarity output.

Voltage Regulation:

Load: 0.02% of output voltage for a full load change.
Line: 0.01% for \pm 10% change in input voltage.

Current Regulation:

Load: 0.01% of output current from 0 to rated voltage.
Line: 0.01% of rated current over specified input range.

Ripple:

0.1% p-p of maximum rated output voltage.

Dimensions:

2.06"H x 5.63"W x 5.69"D
(52.32mm x 143mm x 144.53mm)

Weight:

2.2 pounds (1kg)

Input Connector:

9 pin AMP Metri-Mate. Mating connector and pins supplied.

Output Cable:

18" \pm 1" (457mm) of UL® listed high voltage wire.

Voltage Stability:

0.02% per 8 hours (after 1/2 hour warm-up).

Voltage Temperature Coefficient:

0.01% per °C.

Voltage Test Point:

10Vdc \pm 2% = maximum rated output.

Current Test Point:

10Vdc \pm 2% = maximum rated output.

Remote Enable:

3.4Vdc = HV ON.
1.0Vdc or open = HV OFF.

Regulatory Approvals:

Compliant to EEC EMC Directive (1kV to 15kV only).
Compliant to EEC Low Voltage Directive (1kV to 15kV only).
UL/CUL recognized, File E148969 (1kV to 15kV only).

EPM SELECTION TABLE

Maximum Rating kV	mA	Model Number
1	30	EPM 1*30
3	10	EPM 3*30
5	6	EPM 5*30
10	3	EPM 10*30
15	2	EPM 15*30
20	1.5	EPM 20*30
25	1.2	EPM 25*30
30	1	EPM 30*30

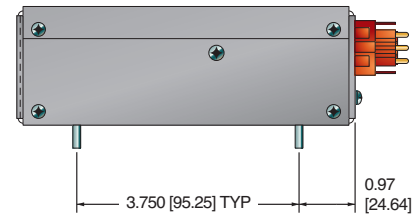
*Specify "P" for positive polarity or "N" for negative polarity.

INPUT – 9 PIN AMP CONNECTOR

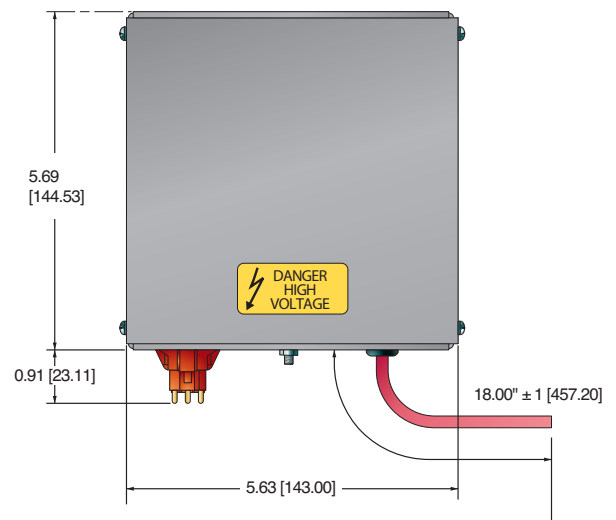
PIN	SIGNAL	PARAMETERS
1	Power Ground	Power Ground
2	+24Vdc	+24Vdc @ 1.85 amps, maximum
3	High Voltage Enable/Inhibit	0Vdc = HV OFF, +5Vdc = HV ON (see manual for details)
4	Voltage Test Point	0 to 10Vdc = 0 to 100% rated output, Zout = 10kΩ
5	Current Test Point	0 to 10Vdc = 0 to 100% rated output, Zout = 10kΩ
6	Voltage Programming	0 to 10Vdc = 0 to 100% rated output, Zin = 10MΩ
7	Current Programming	0 to 10Vdc = 0 to 100% rated output, Zin = 10MΩ
8	+10Vdc Reference	+10Vdc @ 1mA maximum
9	Signal Ground	Signal Ground

DIMENSIONS: in.[mm]

SIDE VIEW



TOP VIEW



FRONT VIEW

