



- **Output Voltages from 1kV to 60kV**
- **Arc and Short Circuit Protected**
- **Low Stored Energy**
- **Test Points for Output Current and Voltage**
- **Enable/Inhibit Control of Output**
- **OEM Customization Available**

Spellman's SMS Series of 60 watt high voltage power supplies are based on a proprietary resonant fly back power conversion topology that provides over 80% efficiency. These fixed polarity modules (specify positive or negative at time of order) feature both voltage and current regulation with automatic crossover, making them ideal for sensitive load applications. The robust design of SMS Series along with comprehensive arc and short circuit protection allow operation in the most demanding environments.

### TYPICAL APPLICATIONS

Electrospinning  
Hipot Testing  
Detector Arrays  
Electrophoresis  
Cable Testing

### SPECIFICATIONS

#### Input:

+24Vdc  $\pm 10\%$  @ 4.0A

#### Output:

10 models from 1kV to 60kV. Positive or negative polarity outputs.

#### Efficiency:

80 to 85%, typical

#### Voltage Regulation:

Load: 0.01% of output voltage no load to full load.  
Line:  $\pm 0.01\%$  for  $\pm 10\%$  change in input voltage.

#### Current Regulation:

Load: 0.1% of output current from 0 to rated voltage.  
Line: 0.05% of rated current over specified input range.

#### Stability:

0.02% per 8 hours.

#### Temperature Coefficient:

0.01% per  $^{\circ}\text{C}$ , voltage or current regulated.

#### Ripple:

0.1% p-p of maximum output voltage.

#### Environmental:

Temperature Range:  
Operating:  $0^{\circ}\text{C}$  to  $40^{\circ}\text{C}$   
Storage:  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$   
Humidity:  
0 to 90%, non-condensing

#### Dimensions:

3"H x 5"W x 9"D (7.6cm x 12.7cm x 23.0cm).

#### Weight:

5.25 pounds (2.38kg)

#### Input Connector:

12 pin AMP Metri-Mate (mating connector and pins provided)

#### Output Cable:

18"  $\pm 1"$  (45.7cm) of UL<sup>®</sup> approved high voltage wire

#### Front Panel Ground Connection:

Threaded 8-32 ground stud, nut provided

#### Regulatory Approvals:

Compliant to EEC EMC Directive. Compliant to EEC Low Voltage Directive. RoHS Compliant.

### SMS SELECTION TABLE

Maximum Rating kV	Maximum Rating mA	Model Number
1	60	SMS 1*60
3	20	SMS 3*60
5	12	SMS 5*60
10	6	SMS 10*60
15	4	SMS 15*60
20	3	SMS 20*60
30	2	SMS 30*60
40	1.5	SMS 40*60
50	1.2	SMS 50*60
60	1.0	SMS 60*60

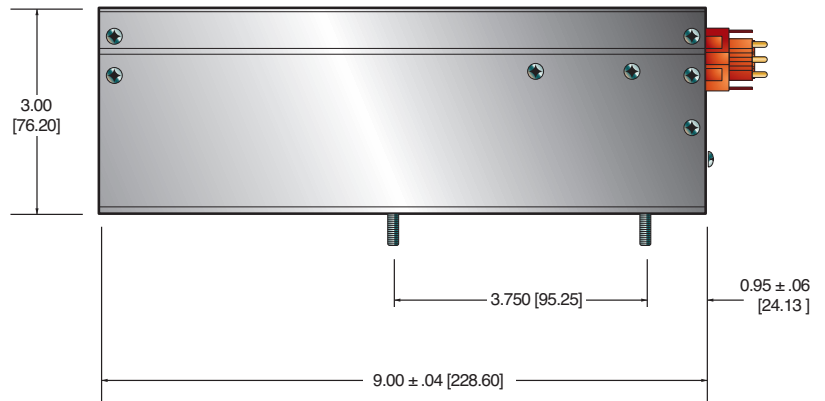
\*Specify "P" for positive polarity or "N" for negative polarity.

### CONNECTOR 12 PIN

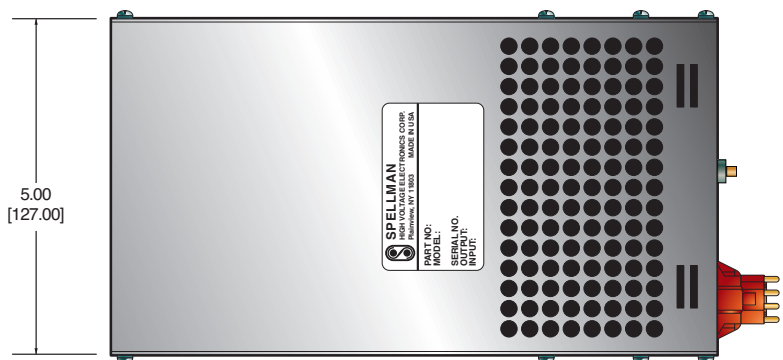
PIN	SIGNAL	PARAMETERS
1	Power Ground	+24Vdc Return
2	+24Vdc Input	+24Vdc @ 3.5 amps, maximum
3	High Voltage Enable/Inhibit	Open = HV OFF, Ground = HV ON
4	Voltage Test Point	0 to 10Vdc = 0 to 100% of rated output
5	Current Test Point	0 to 10Vdc = 0 to 100% of rated output
6	Voltage Programming	0 to 10Vdc = 0 to 100% of rated output
7	Current Programming	0 to 10Vdc = 0 to 100% of rated output
8	+10Vdc Reference	+10Vdc @ 1mA maximum
9	Signal Ground	Signal Ground
10	Spare	No Connection
11	Spare	No Connection
12	Spare	No Connection

DIMENSIONS: in.[mm]

#### SIDE VIEW



#### TOP VIEW



#### BACK VIEW

