



- **Output Voltages from 1kV to 70kV**
- **Arc and Short Circuit Protected**
- **Low Stored Energy**
- **Test Point for Output Current and Voltage**
- **Enable/Inhibit Control of Output**
- **Safety Interlock Circuit**
- **OEM Customization Available**

Spellman's AC input PCM Series of 120 watt high voltage power supply modules feature a power factor corrected front end, providing 0.99 power factor along with universal input voltage (85Vac to 265Vac) capabilities. 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 PCM 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:

85-265Vac, 47-63Hz @ 1.8A, power factor corrected.  
UL® rated for 85-250Vac input for 1kV to 5kV models.

#### Power Factor (Typical):

FL: 0.99  
NL: 0.98

#### Efficiency:

80 to 85%, typical

#### Output:

11 models from 1kV to 70kV. Positive or negative polarity outputs, specify at time of order.

#### Voltage Regulation:

Load: 0.01% of output voltage, no load to full load.  
Line: ±0.01% for ±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 output voltage.

#### Voltage Stability:

0.02% per 8 hours.

#### Temperature Coefficient:

100ppm per °C, voltage or current regulated.

#### Environmental:

Operational: 0 to 40°C  
Storage: -40°C to +85°C  
Humidity: 0 to 90%, non-condensing

#### Dimensions:

1kV to 50kV: 3.65"H x 5"W x 9"D  
(9.27cm x 12.7cm x 22.9cm).  
60, 70kV: 3.65"H x 5"W x 11"D  
(9.27cm x 12.7cm x 27.9cm).

#### Weight:

7 pounds (3.18kg)

#### AC Input Connectors:

IEC320 with mating cable.

#### Interface Connector:

15 pin D connector.

#### HV Output Cable:

Spellman Delrin type connector with 36"  
(91.4cm) shielded cable.

#### Front Panel Ground Connection:

Threaded 8-32 ground stud

#### Regulatory Approvals:

Compliant to EEC EMC Directive. Compliant to EEC Low Voltage Directive. UL/CUL recognized, File E148969 (up to 60kV only). RoHS Compliant.

### PCM SELECTION TABLE

Maximum Rating kV	Maximum Rating mA	Model Number
1	120	PCM 1*120
3	40	PCM 3*120
5	24	PCM 5*120
10	12	PCM 10*120
15	8	PCM 15*120
20	6	PCM 20*120
30	4	PCM 30*120
40	3	PCM 40*120
50	2.4	PCM 50*120
60	2.0	PCM 60*120
70	1.7	PCM 70*120

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

### PCM D CONNECTOR 15 PIN

PIN	SIGNAL	PARAMETERS
1	Remote mA Program	0 to 10Vdc = 0 to 100% of rated output
2	Remote kV Program	0 to 10Vdc = 0 to 100% of rated output
3	High Voltage Enable/Inhibit	Open = HV Inhibit, Ground = HV ON
4	mA Monitor	0 to 10Vdc = 0 to 100% of rated output
5	Interlock Return	Connect to pin 6 to close interlock circuit
6	Interlock Out	Connect to pin 5 to close interlock circuit
7	kV Monitor	0 to 10Vdc = 0 to 100% of rated output
8	Local kV Program	Multi-turn front panel pot (screwdriver)
9	Power Supply Fault	0Vdc = No Fault, +15Vdc @ 1mA = Fault
10	+10Vdc Reference	+10Vdc @ 1mA maximum
11	Signal Ground	Signal Ground
12	Spare	No Connection
13	Spare	No Connection
14	Spare	No Connection
15	Local mA Program	Multi-turn front panel pot (screwdriver)

DIMENSIONS: in.[mm]

