



- **OUTPUT VOLTAGE FROM 1KV TO 70KV**
- **OVERVOLTAGE AND SHORT-CIRCUIT PROTECTION**
- **EMI/RFI INPUT FILTER**
- **TEST POINTS FOR OUTPUT VOLTAGE AND CURRENT**
- **INTERNAL 10V REFERENCE**
- **OUTPUT INHIBIT CONTROL VIA TTL SIGNAL**
- **OEM CUSTOMIZATION AVAILABLE**

www.spellmanhv.com/manuals/PTV

Spellman's PTV Series of modular high voltage power supplies deliver up to 350W of continuous power. A quasi-resonant inverter design provides over 80% efficiency with very fast dynamic response. PTV power supplies incorporate extensive standard features in two power output ranges (200W and 350W) with a wide range of output voltages operating to the most exacting specifications.

TYPICAL APPLICATIONS

Projection Television
X-ray Systems
E-beam Systems
Capacitor Charging systems
CPT/CRT Testing

OPTIONS

FG Floating Ground (50V max)
BPM/S Bipolar Master/Slave
NSS No Slow Start
TP(x) Alternate Test Point Scaling

SPECIFICATIONS

Input:

115Vac \pm 10%, 50/60Hz.
220Vac \pm 10%, 50/60Hz.
Optional: 100Vac \pm 10%, 50/60Hz.
Specify at time of ordering.

Output:

Models from 1kV to 70kV, 200W or 350W. Each model is available in positive or negative polarity outputs.

Voltage Regulation:

Load: 0.01% of output voltage no load to full load.
Line: \pm 0.01% for a \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.

Efficiency:

80%, typical.

Ripple:

PTV200: 0.1% p-p of output voltage.
PTV350: 0.2% p-p of output voltage.

Switching Frequency:

45-65kHz, nominal

Temperature:

Operating: 0°C to +40°C.
Storage: -40°C to +85°C.

Voltage Temperature Coefficient:

0.01%/°C

Stability (voltage & current):

0.01%/hr after 1/2 hour warm-up.
0.02% per 8 hours.

Cooling:

200W: Convection cooled.
350W: Fan cooled, rear air intake.

Dimensions:

1-40kV: $3\frac{3}{16}$ "H x $10\frac{3}{4}$ "W x 10"D
(8.1cm x 27.3cm x 25.4cm).
50-70kV: $4\frac{3}{16}$ "H x $10\frac{7}{8}$ "W x $11\frac{13}{16}$ "D
(10.65cm x 27.6cm x 35.1cm).

HV Output:

Flying lead 18" \pm 1" (45.7cm) UL listed.
AMP LGHI connector available for 40kV only.

Power Input Connector:

IEC320.

AC Line Voltage Input Cable:

Length: 8' (2.4m).

Regulatory Approvals:

Compliant to 2004/108/EC, the EMC Directive
and 2006/95/EC, the Low Voltage Directive.
UL/CUL recognized, File E148969 (up to 5kV only).

PTV SELECTION TABLE

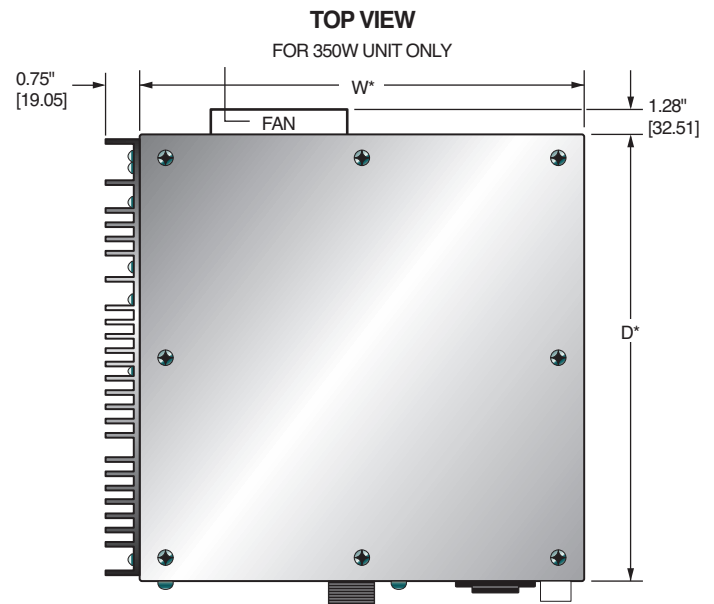
200 Watt Model PTV200			350 Watt Model PTV350		
kV	mA	Model Number	kV	mA	Model Number
1	200	PTV1*200	1	350	PTV1*350
3	70	PTV3*200	3	117	PTV3*350
5	40	PTV5*200	5	70	PTV5*350
10	20	PTV10*200	10	35	PTV10*350
15	14	PTV15*200	15	23	PTV15*350
20	10	PTV20*200	20	18	PTV20*350
25	8	PTV25*200	25	14	PTV25*350
30	7	PTV30*200	30	12	PTV30*350
40	5	PTV40*200	40	9	PTV40*350
50	4	PTV50*200	50	7	PTV50*350
60	3.3	PTV60*200	60	5.8	PTV60*350
70	2.85	PTV70*200	70	5.0	PTV70*350

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

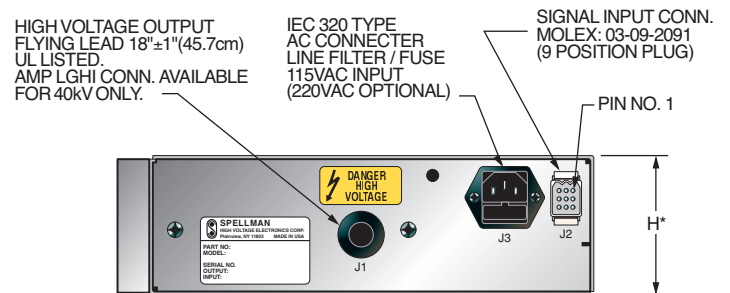
INTERFACE CONNECTOR 9 PIN

J2	SIGNAL	PARAMETERS
1	+10Vdc Reference	+10Vdc @ 1mA, maximum
2	Current Program	0 to 10Vdc = 0 to 100% rated output, Z _{in} = 10MΩ
3	Voltage Monitor	0 to 10Vdc = 0 to 100% rated output, Z _{out} = 10kΩ
4	Voltage Program	0 to 10Vdc = 0 to 100% rated output, Z _{in} = 10MΩ
5	Common Ground	Power Ground
6	Current Monitor	0 to 10Vdc = 0 to 100% rated output, Z _{out} = 10kΩ
7	Enable/Inhibit	Ground = Inhibit, Open = HV ON
8	OVP Indicator	Collector w/1kΩ pull up to +5Vdc, transistor on =OVP
9	Signal Return	Signal Return

DIMENSIONS: in.[mm]



BACK VIEW



*See Specification for H, W, D Dimensions.

SIDE VIEW

