



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:

200W: 115Vac $\pm 10\%$ @ 2.5A, 50/60Hz
350W: 115Vac $\pm 10\%$ @ 4.3A, 50/60Hz
200W: 220Vac $\pm 10\%$ @ 1.3A, 50/60Hz
350W: 220Vac $\pm 10\%$ @ 2.2A, 50/60Hz
Optional:
200W: 100Vac $\pm 10\%$ @ 2.8A, 50/60Hz
350W: 100Vac $\pm 10\%$ @ 4.9A, 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.

- **Output Voltages from 1kV to 70kV**
- **Overvoltage and Short Circuit Protection**
- **EMI/RFI Input Filter**
- **Test Points for Output Current and Voltage**
- **Internal 10V Reference**
- **Output Inhibit Control Via TTL Signal**
- **OEM Customization Available**

www.spellmanhv.com/manuals/PTV

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 $+40^{\circ}\text{C}$.
Storage: -40°C to $+85^{\circ}\text{C}$.

Voltage Temperature Coefficient:

0.01%/ $^{\circ}\text{C}$

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: 3.187" H x 10.75" W x 10" D
(8.1cm x 27.3cm x 25.4cm).
50-70kV: 4.187" H x 10.875" W x 11.812" D
(10.65cm x 27.6cm x 35.1cm).

HV Output:

Flying lead 18 ± 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 EEC EMC Directive. Compliant to EEC Low Voltage Directive. UL/CUL recognized, File E148969 (up to 5kV only). RoHS compliant.

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.

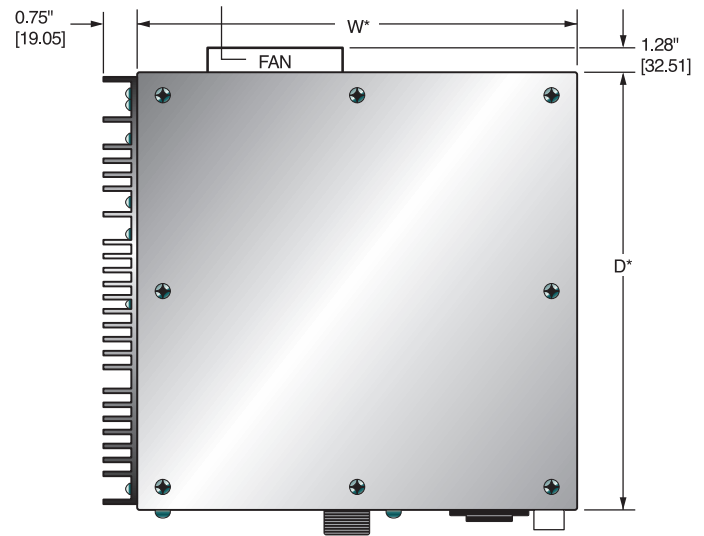
INTERFACE CONNECTOR 9 PIN

PIN	SIGNAL	PARAMETERS
1	+10Vdc Reference	+10Vdc @ 1mA, maximum
2	Current Program	0 to 10Vdc = 0 to 100% rated output, Zin = 10MΩ
3	Voltage Monitor	0 to 10Vdc = 0 to 100% rated output, Zout = 10kΩ
4	Voltage Program	0 to 10Vdc = 0 to 100% rated output, Zin = 10MΩ
5	Common Ground	Power Ground
6	Current Monitor	0 to 10Vdc = 0 to 100% rated output, Zout = 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

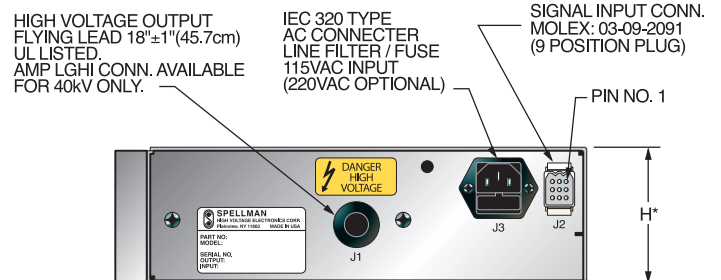
DIMENSIONS: in.[mm]

TOP VIEW

FOR 350W UNIT ONLY



BACK VIEW



*See Specification for H, W, D Dimensions.

SIDE VIEW

