

RACK POWER SUPPLIES

ELECTROSTATICS

E-BEAM SYSTEMS

ION BEAM IMPLANTATION

CAPACITOR CHARGING

HIPOT TESTING

GENERAL LABORATORY

CW LASERS

SEMICONDUCTOR PROCESSING

CPT/CRT TESTING

ELECTRON GUNS

PARTICLE ACCELERATORS

SPUTTERING

RADAR MODULATORS

INDUSTRIAL COOKING

POWDER DRYING

RUBBER VULCANIZATION

PLASMA GENERATION

CERAMIC SINTERING

www.spellmanhv.com

RACK SPECIFIER



SL 10W 15W 30W 125W 225W 1200W 2000W 4kW 6kW 8kW 10kW 12kW 36kW 120kW

1kV - 130kV

Input: 115Vac or 220Vac $\pm 10\%$
Load Reg.: 0.005%
Line Reg.: $\pm 0.005\%$
Ripple: 0.1% p-p +1Vrms
Dims.: 10W-300W
 1.75"H x 19"W x 19"D
 45mm x 483mm x 483mm
 600W-1200W
 3.5"H x 19"W x 19"D
 89mm x 483mm x 483mm
 (Depth is 24" for 80-130kV Units)

- **VERY COMPACT AND LIGHTWEIGHT**
- **LOW EMI AND RFI**
- **SYSTEM STATUS INDICATORS**
- **ARC QUENCH/ARC COUNT/ARC TRIP**
- **OEM CUSTOMIZATION AVAILABLE**



Spellman's SL Series of high voltage power supplies are designed to meet uncompromising performance standards in a minimum of space. Their circuitry includes a resonant high frequency inverter with proprietary control which provides fault-free operation in extreme transient and arcing environments with greater than 85% efficiency. These full featured supplies are available in a wide range of outputs with many options.

205B 10W 15W 30W 125W 225W 1200W 2000W 4kW 6kW 8kW 10kW 12kW 36kW 120kW

1kV - 50kV

Input: 115Vac $\pm 10\%$, 230Vac $\pm 10\%$
Load Reg.: $\leq 0.005\%$
Line Reg.: $\leq 0.001\%$
Ripple: as low as 10mV
Dims.: 1-20kV
 3.5"H x 19"W x 9.625"D
 89mm x 483mm x 244mm
 30-50kV
 5.25"H x 19"W x 16"D
 133mm x 483mm x 406mm

- **LOW RIPPLE AND NOISE**
- **DIGITAL METERING**
- **REVERSIBLE OUTPUT POLARITY**



Spellman's BERTAN brand of 205B Series high voltage power supplies provide regulated high voltage outputs from 1 to 50kV. The low noise, linear topology employed results in extremely low output ripple specifications. These 15 to 30 watt units are inherently reversible by design, providing either positive or negative output polarity. The 205B is fully arc and short circuit protected. Excellent regulation specifications are featured along with outstanding stability performance.

225 10W 15W 30W 125W 225W 1200W 2000W 4kW 6kW 8kW 10kW 12kW 36kW 120kW

500V - 50kV

Input: 115Vac $\pm 10\%$, 230Vac $\pm 10\%$
Load Reg.: $\leq 0.005\%$
Line Reg.: $\leq 0.001\%$
Ripple: as low as 10mV
Dims.: 1-20kV
 3.5"H x 19"W x 9.625"D
 89mm x 483mm x 244mm
 30-50kV
 5.25"H x 19"W x 16"D
 133mm x 483mm x 406mm

- **LOW RIPPLE AND NOISE**
- **5.5 DIGIT FRONT PANEL DIGITAL METERING**
- **REVERSIBLE OUTPUT POLARITY**
- **IEEE-488 INTERFACE**



Spellman's BERTAN brand of 225 Series high voltage power supplies provide regulated high voltage outputs from 500V to 50kV. An advanced IEEE-488 digital interface, allowing comprehensive power supply control capability is included. The low noise, linear topology employed results in extremely low output ripple specifications. These 15 to 30 watt units are inherently reversible by design, providing either positive or negative output polarity. The 225 is fully arc and short circuit protected. Excellent regulation specifications are featured along with outstanding stability performance.

210 10W 15W 30W 125W 225W 1200W 2000W 4kW 6kW 8kW 10kW 12kW 36kW 120kW

1kV - 50kV

Input: 115Vac $\pm 10\%$, 220Vac $\pm 10\%$
Load Reg.: $\leq 0.005\%$
Line Reg.: $\leq 0.001\%$
Ripple: as low as 50mV
Dims.: 1-5kV
 5.25"H x 19"W x 11"D
 133mm x 483mm x 279mm
 10-50kV
 5.25"H x 19"W x 16"D
 133mm x 483mm x 406mm

- **LOW RIPPLE AND NOISE**
- **REVERSIBLE OUTPUT POLARITY**



Spellman's BERTAN brand of 210 Series of 125 to 225 watt high voltage power supplies provide regulated high voltage outputs from 1 to 50kV. The low noise, linear topology employed results in extremely low output ripple specifications. Units are inherently reversible by design, providing either positive or negative output polarity. The 210 is fully arc and short circuit protected. Excellent regulation specifications are featured along with outstanding stability performance.

SL150KV
150kV

| | | | | | | | | | | | | | |
|-----|-----|-----|------|------|-------|-------|-----|-----|-----|------|------|------|-------|
| 10W | 15W | 30W | 125W | 225W | 1200W | 2000W | 4kW | 6kW | 8kW | 10kW | 12kW | 36kW | 120kW |
|-----|-----|-----|------|------|-------|-------|-----|-----|-----|------|------|------|-------|

Input: 220Vac ±10%
 Load Reg.: 0.01%
 Line Reg.: ±0.01%
 Ripple: 0.1% p-p
 Dims.: 8.75"H x 19"W x 22"D
 222mm x 483mm x 558mm

- **REQUIRES ONLY 8.75" (5U) PANEL HEIGHT**
- **EXTENSIVE ANALOG INTERFACE**
- **ARC QUENCH/ARC COUNT/ARC TRIP**
- **COMPREHENSIVE DIGITAL FAULT DIAGNOSTICS**



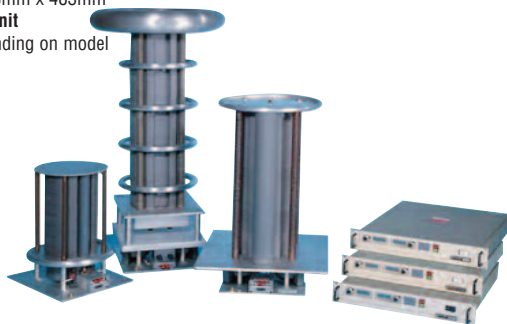
Spellman's SL150kV rack mount high voltage power supply is designed for scientific and industrial OEM applications requiring a compact cable connected standard sized rack. Models are available in positive, negative or reversible polarity. The SL150kV is fully arc and short circuit protected.

SLS
160kV–360kV

| | | | | | | | | | | | | | |
|-----|-----|-----|------|------|-------|-------|-----|-----|-----|------|------|------|-------|
| 10W | 15W | 30W | 125W | 225W | 1200W | 2000W | 4kW | 6kW | 8kW | 10kW | 12kW | 36kW | 120kW |
|-----|-----|-----|------|------|-------|-------|-----|-----|-----|------|------|------|-------|

Input: 220Vac ±10%
 Load Reg.: <0.05%
 Line Reg.: <0.05%
 Ripple: 0.1% p-p
 Dims.: Inverter Driver Chassis
 3.5"H x 19"W x 19"D
 89mm x 483mm x 483mm
 Multiplier Unit
 Varies depending on model

- **LOW RIPPLE, HIGH STABILITY**
- **OVERCURRENT, OVERVOLTAGE AND ARC PROTECTION**
- **LIGHTWEIGHT, COMPACT SIZE**
- **OEM CUSTOMIZATION AVAILABLE**



The SLS series of high voltage power supplies utilize high frequency resonant inverters for reliable operation in extreme environments. The high voltage multiplier unit is built with a hybrid design of solid encapsulation and air, reducing its overall size. Comprised of 20kV interlocking wafers, the multiplier unit offers flexible building blocks for many different output configurations.

SA4
1kV–70kV

| | | | | | | | | | | | | | |
|-----|-----|-----|------|------|-------|-------|-----|-----|-----|------|------|------|-------|
| 10W | 15W | 30W | 125W | 225W | 1200W | 2000W | 4kW | 6kW | 8kW | 10kW | 12kW | 36kW | 120kW |
|-----|-----|-----|------|------|-------|-------|-----|-----|-----|------|------|------|-------|

Input: 208Vac ±10%
 Load Reg.: 0.005% +500mV
 Line Reg.: ±0.005% +500mV
 Ripple: as low as 0.1% +1Vrms
 Dims.: 5.25"H x 19"W x 22"D
 133mm x 483mm x 558mm

- **LOW COST PER WATT**
- **LOW EMI AND RFI**
- **CONSTANT VOLTAGE/CONSTANT CURRENT OPERATION WITH AUTOMATIC CROSSOVER**
- **SYSTEM STATUS INDICATORS**



Similar to the SR6 power supplies, the SA4 Series incorporate series resonant inverter technology with a patented control circuit. This enables the supplies to operate without damage or interruption in rugged environments that frequently pose threats to conventional high voltage power supplies. In addition, the SA4 Series protects your load from excessive peak current when an arc-over condition is sensed.

SR6
1kV–120kV

| | | | | | | | | | | | | | |
|-----|-----|-----|------|------|-------|-------|-----|-----|-----|------|------|------|-------|
| 10W | 15W | 30W | 125W | 225W | 1200W | 2000W | 4kW | 6kW | 8kW | 10kW | 12kW | 36kW | 120kW |
|-----|-----|-----|------|------|-------|-------|-----|-----|-----|------|------|------|-------|

Input: 208Vac ±10%
 Load Reg.: 0.005%
 Line Reg.: ±0.005%
 Ripple: as low as 0.1% +1Vrms
 Dims.: 1-70kV
 10.5"H x 19"W x 19"D
 267mm x 483mm x 483mm
 80-120kV
 10.5"H x 19"W x 24"D
 267mm x 483mm x 610mm

- **COMPACT DESIGN AND LIGHTWEIGHT**
- **LOW COST PER WATT**
- **LOW EMI AND RFI**
- **CONSTANT VOLTAGE/CONSTANT CURRENT OPERATION WITH AUTOMATIC CROSSOVER**
- **OEM CUSTOMIZATION AVAILABLE**



SR6 power supplies are available in 18 models with voltage outputs ranging from 1kV to 120kV. Similar to the SA4 power supplies, they incorporate series resonant inverter technology with a patented control circuit. This enables the supplies to operate without damage or interruption in rugged environments that frequently pose threats to conventional high voltage power supplies. In addition, the SR6 Series protects your load from excessive peak currents by instantaneously limiting the output current when an arc-over condition is sensed. Parallel operation options to increase power and current capabilities are available for SR6 models with power outputs of 12kW, 18kW and higher.

MG
1kV–20kV

| | | | | | | | | | | | | | |
|-----|-----|-----|------|------|-------|-------|-----|-----|-----|------|------|------|-------|
| 10W | 15W | 30W | 125W | 225W | 1200W | 2000W | 4kW | 6kW | 8kW | 10kW | 12kW | 36kW | 120kW |
|-----|-----|-----|------|------|-------|-------|-----|-----|-----|------|------|------|-------|

Input: 480Vac ±10%
 Load Reg.: 0.05%
 Line Reg.: ±0.1%
 Ripple: 5% rms
 Dims.: MG36 (shown)
 36.75"H x 19"W x 19"D
 934mm x 483mm x 483mm
 (See full data sheet for additional models and specifications)

- **CURRENT OUTPUT SOURCE**
- **LOW STORED ENERGY**
- **FAST FAULT SHUTDOWN (<30µSEC)**
- **PROVISION TO LIMIT MICROWAVE REFLECTED POWER**
- **PROGRAMMABLE FILAMENT SUPPLY**
- **OVERVOLTAGE, OVERCURRENT, ARC, AND SHORT CIRCUIT PROTECTION**
- **OEM CUSTOMIZATION AVAILABLE**



MG36-36kW Supply

Spellman's MG Series of magnetron HV power supplies are rugged, high frequency, high efficiency units designed specifically to power CW magnetrons ranging from 10kW to 120kW. They contain filament and optional magnet control supplies to provide a complete drive system.



UNITED STATES

Spellman USA and Corporate HQ
475 Wireless Blvd.
Hauppauge, NY 11788
United States
tel: +1-631-630-3000
fax: +1-631-435-1620
e-mail: sales@spellmanhv.com

Spellman USA

One Commerce Park
Valhalla, NY 10595
Tel: 914-686-3600
Fax: 914-686-5424

EUROPE

Spellman Ltd.

Broomers Park, Unit #14
Broomers Hill Lane, Pulborough
West Sussex, RH20 2RY
England
tel: +44(0) 1798 877000
fax: +44(0) 1798 872479
e-mail: sales@spellmanhv.co.uk

JAPAN

Spellman Japan

4-3-1 Kamitoda
Toda-shi
Saitama-ken, Japan 335-0022
tel: +81(0) 48-447-6500
fax: +81(0) 48-447-6501
e-mail: sales@spellmanhv.co.jp

CHINA

Spellman China

Spellman (SIP) Co., Ltd.
No. 5 Xinghan Street
Block A #2-03/08
Suzhou Industrial Park,
China, 215021
tel: +(86) 512-69006010
fax: +(86) 512-67630030
e-mail: sales@spellmanhv.cn

MEXICO

Spellman Mexico

Diagonal Lorenzo de la Garza no.65
H. Matamoros, Tamaulipas
Mexico