SL150kV 1200W POWER SUPPLY

- ***Cable Connected 150kV @ 1200W Power Supply***
- ***Requires Only 8.75˝(5U) Panel Height***
- ***Extensive Analog Interface***
- ***Arc Quench/Arc Count/Arc Trip***
- ***Comprehensive Digital Fault Diagnostics***

www.spellmanhv.com/manuals/SL150KV

Spellman's SL150kV rack mount high voltage power supply is designed for scientific and industrial OEM applications requiring 150kV at 1200 watts in 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. Excellent regulation specifications are provided along with outstanding stability performance. The vacuum encapsulated high voltage output section assures reliable corona free operation by eliminating any concerns due to environmental factors.

TYPICAL APPLICATIONS

Electrostatics
HiPot Testing
Semiconductor Processing
Capacitor Charging

OPTIONS

200	200Vac Input Voltage
AOL	Adjustable Overload Trip
APT	Adjustable Power Trip
AT	Arc Trip
BFP	Blank Front Panel
CPC	Constant Power Control
DPM4	4.5 Digit Panel Meters
EFR	External Fault Relay
LL(X)	Non-Standard HV Cable Length (10 standard)
NAD	No Arc Detect
NSS	No Slow Start
RFR	Remote Fault Reset
SS(X)	Non-Standard Slow Start (6 seconds standard)

SPECIFICATIONS

Front Panel Controls:
Power ON/OFF switch, HV ON Switch, HV OFF Switch with preset feature, 3.5 digit backlight digital meters for display of output voltage and output current,10 turn locking potentiometers with counting dials for adjustment of both output voltage and output current.

Front Panel Indicators:

HV ON	High Voltage Inhibit
HV OFF	Over Current
Voltage Control Mode	Over Voltage
Current Control Mode	Arc
Interlock Open	Regulation Error
Interlock Closed	Overtemperature

Input:
220Vac ±10%, 50/60Hz @ 12A
200Vac ±10%, 50/60Hz @ 13.2A

Output Voltage:
0 to 150kV

Output Polarity:
Positive, negative or reversible specify at time of order

Output Current:
8mA

Output Power:
1200W

Voltage Regulation:
Load: 0.01% of rated voltage for a full load change
Line: ±0.01% of rated voltage over specified input voltage range

Current Regulation:
Load: 0.01% of rated current ±100µA for full voltage change.
Line: ±0.01% of rated current over specified input voltage range

Ripple:
0.1% peak to peak of maximum output

Temperature Coefficient:
100ppm/°C.

Stability:
100ppm/hr after a 2 hour warm up, for both voltage and current regulation

Operating Temperature:
0 to 40°C operating

Storage Temperature:
-40 to +85°C storage

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Humidity:
20% to 85%, non-condensing

Input Line Connector:
3 conductor 12 AWG 6 ft (1.83m) cable, permanently attached

Output Connector:
A detachable 10 ft (3.05m) shielded HV cable is provided

Cooling:
Forced Air

Dimensions:
8.75"H x 19"W x 22"D rack mount.
(22.23cm x 48.26cm x 55.88cm)

Weight:
89 pounds (40.4kg)

Regulatory Approvals:
Designed to meet EEC EMC Directive. Designed to meet to EEC Low Voltage Directive. RoHS Compliant.

Electronic Component (Power Source)

SL150kV series is intended for installation as a component of a system.
It is designed to meet CE standards, with conditions of acceptance often being: customer provided enclosure mounting, EMC filtering, and appropriate protection, and isolation devices. The SL150kV series is not intended to be operated by end users as a stand-alone device. The SL150kV series power supply can only be fully assessed when installed within a system, and as a component part within that system.

SL150KV ANALOG INTERFACE— JB4 25 PIN MALE D CONNECTOR

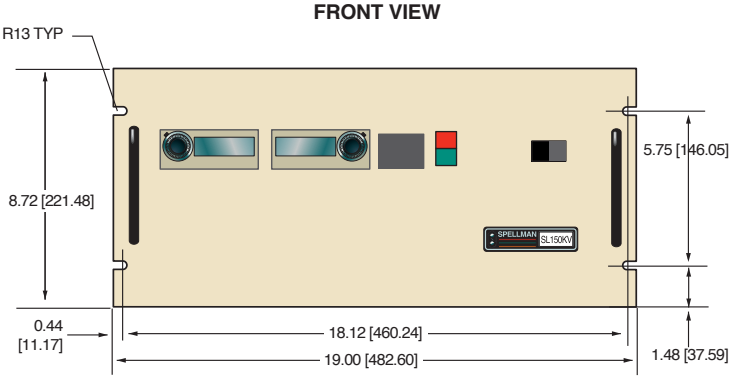
PIN	SIGNAL	PARAMETERS
1	Power Supply Common	Signal Ground
2	External Inhibit	Ground = Inhibit, Open = HV ON
3	External Interlock	+15Vdc @ open, ≤ 5mA @ closed
4	External Interlock Return	Connect to pin 3 to enable supply
5	Current Monitor	0 to 10Vdc = 0 to 100% rated voltage, Zout =10kΩ
6	Voltage Monitor	0 to 10Vdc = 0 to 100% rated voltage, Zout =10kΩ
7	+10Vdc Reference	+10Vdc @ 1mA, maximum
8	Remote Current Program Input	0 to 10Vdc = 0 to 100% rated voltage, Zout =10kΩ
9	Local Current Program Output	Multi-turn front panel pot for local control capability
10	Remote Voltage Program Input	0 to 10Vdc = 0 to 100% rated voltage, Zout =10kΩ
11	Local Voltage Program Output	Multi-turn front panel pot for local control capability
12	EFR (Common)	External Fault Relay (Optional)
13	EFR (Normally Open)	External Fault Relay (Optional)
14	Local HV OFF OUT	+15Vdc @ open, <25mA @ closed, connect to HV OFF for front panel operation
15	HV OFF	Connect to HV OFF OUT for front panel operation
16	Remote HV ON	+15Vdc @ 10mA maximum = HV OFF
17	Remote HV OFF Indicator	0 = HV ON, +15Vdc @ 10mA maximum = HV OFF
18	Remote HV ON Indicator	0 = HV OFF, +15Vdc @ 10mA maximum = HV ON
19	Remote Voltage Mode	Open collector 50Vdc @ 10mA maximum, ON = Active
20	Remote Current Mode	Open collector 50Vdc @ 10mA maximum, ON = Active
21	Remote Power Mode	Open collector 50Vdc @ 10mA maximum, ON = Active
22	Power Supply Fault	Open collector, 50Vdc @ 10mA maximum
23	+15Vdc Output	+15Vdc @ 100mA, maximum
24	Power Supply Ground	Signal Ground
25	Shield Return	Chassis Ground

Specify "P" for positive polarity or "N" for negative polarity, and PN = reversible as illustrated below.

Sample Model Number: SL150P1200/BFP/LL(20)
Where SL = power supply series, 150 = maximum output voltage in kV,
P = positive output polarity, 1200 = maximum output power (watts), BFP = Blank Front Panel, LL(20) = 20 foot HV cable.

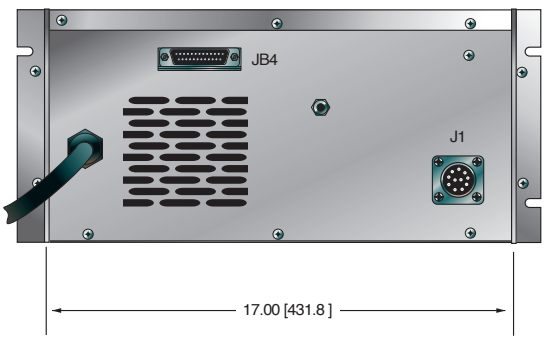
DIMENSIONS: in.[mm]

FRONT VIEW



TOP VIEW

BACK VIEW



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