



- **Multiple Outputs**
- **Three Control Inputs**
- **Three Optical Encoders**
- **RS-232 Serial Port for Control and Monitoring**
- **OEM Customization Available**

Spellman's new DGM945 high voltage power supply for Image Intensifier applications continues to set the standards for high voltage power conversion technology.

The DGM945 also has inputs to allow measurement of the photocathode current and getter current. The photocathode measurement has two ranges : sensitive range: 0 to 50nA and a standard range: 0 to 15 $\mu$ A. The sensitive input is used to provide a monitor output with a sensitivity of 0.1V/nA. The getter input allows measurement of the getter current, indicating if the Image Intensifier tube is still holding a good vacuum and is without gases causing ions.

Monitoring of all output voltages is possible via local test points or over the serial interface. The unit can also store up to eight modes of operation. The output voltages are independently adjustable in each mode either by the rotary encoders built into the unit or via the serial interface.

The DGM series can be adapted to suit specific requirements with a wide selection of multiple output voltages and power capabilities in a compact package, making it perfect for the OEM user.

## TYPICAL APPLICATIONS

Radiology  
Cardiology  
Neuroradiology  
Night Surveillance  
Non Destructive X-Ray Inspection  
Image Intensifiers

## SPECIFICATIONS

### Input Voltage:

+24Vdc  $\pm$ 10%

### Input Current:

500mA maximum

### Programmable Output Voltages:

#### Anode:

Output Voltage: 30kV

Output Current: 5 $\mu$ A continuous (50 $\mu$ A peak)

#### Electrode 1:

Output Voltage: 10V to 350V

Output Current: 0 to 10 $\mu$ A

#### Electrode 2:

Output Voltage: 200V to 2kV

Output Current: 0 to 10 $\mu$ A

#### Electrode 3:

Output Voltage: 2kV to 20kV

Output Current: 0 to 20 $\mu$ A

#### Electrode 4:

Output Voltage: 2.7kV

Output Current: 0 to 10 $\mu$ A

### Ripple:

<0.3%

### Temperature Coefficient:

<200ppmK<sup>-1</sup>

### Stability:

<0.3% over 8 hrs

### Temperature:

Operating: +5°C to +55°C

### Input Connector:

15 pin male sub D

### Dimensions:

5.47"H x 5.67"W x 1.97"D (139mm x 144mm x 50mm)

### Weight:

2.86 lb. (1.3kg)

### Regulatory Approvals:

Compliant to EEC EMC Directive. Compliant to EEC Low Voltage Directive. Compliant to IEC 60601-1. UL/CUL recognized, File E242588. RoHS Compliant.

### INPUT 15 PIN MALE D CONNECTOR

PIN	SIGNAL	SIGNAL PARAMETERS
1	0V	Signal Ground
2	RxD	RS-232 receive data input
3	TxD	RS-232 transmit data output
4	0V	Signal Ground
5	0V	Signal Ground
6	UC2	Mode select input 2
7	0V	Signal Ground
8	0VP	Power return
9	DTR	RS-232 Data terminal ready output
10	CTS	RS-232 Clear to send input
11	N/C	N/C
12	Ipc	Ipc = 10nA / volt
13	UC3	Mode select input 3
14	UC1	Mode select input 1
15	24V	Power input

### INPUT/OUTPUT CONNECTORS

#### Test Point Terminals:

Copper pad plus 1.1 mm Ø pth.

#### Output Terminals (0V, OVP and GND):

6.3mm Fast-on connector and M4 x 12mm stud

#### Output Connector Anode:

LGH1

#### Output Connector (other electrodes):

LGH½

#### Inputs PC and G:

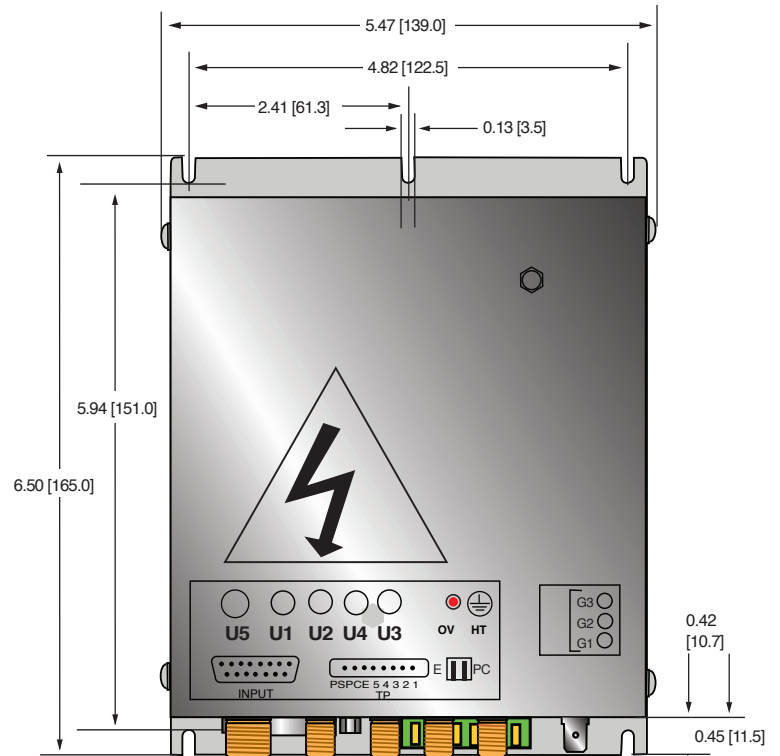
6.3mm Fast-on connector

Note: 0V, OVP and GND are all connected together internally.

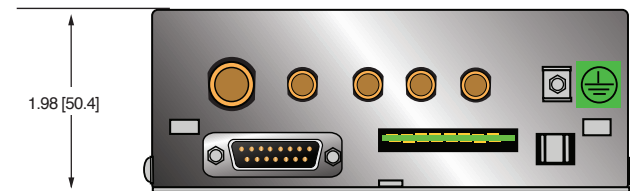
All outputs are protected against high voltage breakdown in the user's equipment and short-circuit protected.

DIMENSIONS: in.[mm]

#### TOP VIEW



#### FRONT VIEW



#### SIDE VIEW

