

REGULATED LINE OPERATED MODULAR HIGH VOLTAGE POWER SUPPLIES

SERIES XRM

10 Models Covering the range of 0-1.5 KV to 0-60 KV up to 100 Watts

FEATURES:

- Voltage / Current Programmable
- Constant Voltage/Constant Current
- Voltage / Current Monitoring
- 105 ~ 125VAC Line Operated
- External Interlock Capability
- Arc & Short Circuit Protected

APPLICATIONS:

- X-Ray Systems
- CRT Displays / Projection Systems
- Photomultipliers
- Capacitor Chargers



MODEL GUIDE

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	
		60W	100W
XRM 1.5	0 to 1.5KV	40.0mA	66.0mA
XRM 3	0 to 3KV	20.0mA	33.0mA
XRM 5	0 to 5KV	12.0mA	20.0mA
XRM 10	0 to 10KV	6.0mA	10.0mA
XRM 15	0 to 15KV	4.0mA	6.6mA
XRM 20	0 to 20KV	3.0mA	5.0mA
XRM 30	0 to 30KV	2.0mA	3.3mA
XRM 40	0 to 40KV	1.5mA	2.5mA
XRM 50	0 to 50KV	1.25mA	2.0mA
XRM 60	0 to 60KV	1.0mA	1.67mA

All units are available in Positive or Negative polarity. Add P or N as suffix to Model number to indicate polarity desired.

DESCRIPTION:

The GAMMA "XRM" series provides a compact, highly stabilized, variable high voltage power source of either negative or positive polarity, with ratings to 60KV (higher voltage ratings are available, please contact factory) and power levels to 100 watts. The utilization of switch-mode MOSFET technology allows efficiency of greater than 75%, increasing overall reliability. High voltage circuits are vacuum encapsulated in a silicone elastomer providing corona free, long term reliability.

Dual control loops allow independent control of both voltage and current where required.

All control circuits are ground referenced allowing for ease of interfacing and control.

The excellent electrical characteristics of the "XRM" series make it an ideal choice for the most demanding high voltage applications.



GAMMA HIGH VOLTAGE RESEARCH INC.

Designers / Manufacturers High Voltage Power Supplies 1096N US Highway 1, ORMOND BEACH, FL 32174 * TEL. 386-677-7070, FAX 386-677-3039



SERIES XRM

ELECTRICAL CHARACTERISTICS:

PHYSICAL CHARACTERISTICS:

Input Voltage: 105 ~ 125 VAC 50 to 400 Hz **Dimensions:** 6" (H) x 4" (W) x 10" (L)

Output Voltage: Continuously adjustable from 0 to maximum output voltage **Weight:** 10 lbs.

Output Current: See ratings of individual models

Packaging: Modular construction with high voltage section encapsulated in a silicone elastomer.

Voltage Regulation: Line: ±0.005% over specified input range

Input Connector: D-Subminiature 15 pin connector

Load: ±0.01% for full load change

Current Regulation: Better than $\pm 0.005\%$ over specified input range

Output Termination: Re-entrant type bushing is

standard, with mating output

Customer specified output connectors can be provided.

cable provided.

Ripple: 0.05%

Temp. Coefficient: 100ppm/°C over the range of 0 to 60°C

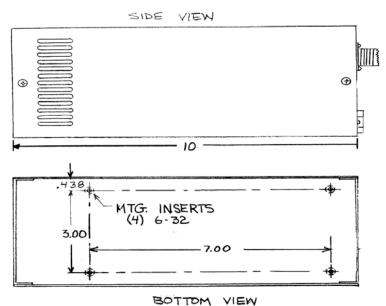
Stability: 0.01%/hour;0.003%/8 hours

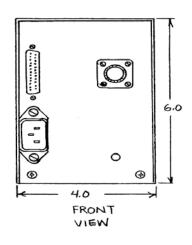
Programming Output Voltage and Output Current: Programmed from either an external voltage source or external potentiometers from the internal reference voltage. A zero to +10V source is required for full scale programming.

Load Regulation: Better than 50uA for a 75% change in compliance voltage



Ref. Voltage: Pin 10 Pin 2 Voltage Program: **Current Program:** Pin 1 Voltage Monitor: Pin 7 **Current Monitor:** Pin 4 Not Used Pin 3 Interlock: Pin 6 Ground: Pin 13, 14 Common: Pin 5, 11,







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