



# GAMMA

## REGULATED DC/DC HIGH VOLTAGE POWER SUPPLIES

### SERIES LXR

### 10 Models Covering the range of 0-1 KV to 0-50 KV up to 30 Watts

#### FEATURES:

- Voltage / Current Programmable
- Constant Voltage / Constant Current
- Voltage / Current Monitoring
- External Interlock Capability
- Arc & Short Circuit Protected

#### APPLICATIONS:

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



*Optional Connectors shown above*

#### MODEL GUIDE

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT
LXR 30-1	0 to 1.0KV	30mA
LXR 30-1.5	0 to 1.5KV	20mA
LXR 30-2	0 to 2KV	30mA
LXR 30-3	0 to 3KV	10mA
LXR 30-5	0 to 5KV	6mA
LXR 30-10	0 to 10KV	3mA
LXR 30-20	0 to 20KV	1.5mA
LXR 30-30	0 to 30KV	1mA
LXR 30-40	0 to 40KV	750μA
LXR 30-50	0 to 50KV	600μA

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

\* 24VDC input is available. Add 24 as suffix to model number.

#### DESCRIPTION:

The GAMMA "LXR" series provides a compact, highly stabilized, variable high voltage power source of either negative or positive polarity, with ratings to 50KV and power levels to 30 watts, powered by a 28 VDC\* source.

The utilization of switch-mode MOSFET technology allows excellent efficiency 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 "LXR" 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



# GAMMA

## SERIES LXR

### ELECTRICAL CHARACTERISTICS

**Input Voltage:** +28VDC +/-10%

**Output Voltage:** 10 Models from 1KV to 50KV.  
Positive or Negative polarity models.

**Voltage Regulation:** Load: 0.05% of output voltage (NL to FL)  
Line: ±0.01% for ±10% change in input voltage.

**Current regulation:** Load: 0.05% of output current from 0 to rated voltage.  
Line: 0.05% of rated current over specified input range.

**Ripple:** 0.5% P/P of output voltage.

**Temp. Coefficient:** 0.01% per °C, voltage or current regulated.

**Voltage Stability:** 0.02% per 8 hours

### PHYSICAL CHARACTERISTICS

**Dimensions:**

3.75" x 6.0" x 2.75"(H) up to and including 40kV

4.375" x 7.5"\* x 3" (H) 50kV Supplies

4.375" x 8.5"\*\* x 3"(H)

\*Not including flange

\*\*with mounting flange included

**Input Connector:** D-Subminiature 15 Pin Connector

**Power Input Connector:** Terminal Block

**Output Termination:** Flying Wire  
*(Customer specified connectors can also be provided)*

### ENVIRONMENTAL CHARACTERISTICS

**Operating Temperature Range:** 0 to 50°C

**Storage Temperature Range:** 0 to 70°C



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