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

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.

MODEL GUIDE

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<tr>
<th>MODEL</th>
<th>VOLTAGE</th>
<th>CURRENT</th>
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<tr>
<td>LXR 30-1</td>
<td>0 to 1.0KV</td>
<td>30mA</td>
</tr>
<tr>
<td>LXR 30-1.5</td>
<td>0 to 1.5KV</td>
<td>20mA</td>
</tr>
<tr>
<td>LXR 30-2</td>
<td>0 to 2KV</td>
<td>30mA</td>
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<tr>
<td>LXR 30-3</td>
<td>0 to 3KV</td>
<td>10mA</td>
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<tr>
<td>LXR 30-5</td>
<td>0 to 5KV</td>
<td>6mA</td>
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<tr>
<td>LXR 30-10</td>
<td>0 to 10KV</td>
<td>3mA</td>
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<tr>
<td>LXR 30-20</td>
<td>0 to 20KV</td>
<td>1.5mA</td>
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<tr>
<td>LXR 30-30</td>
<td>0 to 30KV</td>
<td>1mA</td>
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<tr>
<td>LXR 30-40</td>
<td>0 to 40KV</td>
<td>750µA</td>
</tr>
<tr>
<td>LXR 30-50</td>
<td>0 to 50KV</td>
<td>600µA</td>
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</tbody>
</table>

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.

Optional Connectors shown above
### 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