The XLB series Xenon lamp ballasts are designed for the OEM customer. The XLB series is ideal for high power applications where economy is important and performance cannot be compromised.

Compact size is possible due to the low-loss Zero Voltage Switching inverter and incorporation of planar magnetics. Power factor is greater than 0.99 and conducted emissions meet stringent European regulations. No additional line filter is required to meet EN 55011 emission requirements.

The XLB Lamp Ballasts set the standard for reliable lamp ignition and long term high power operation in a low cost, compact package. All 5 models offer precision regulation and the lowest ripple specifications in the industry.

They are ideal for medical, projection and industrial applications where a stable light source is essential.

Advantages

Models from 650 to 5000 watts
Ideal for OEM applications
Reliable “Short Pulse” Ignition
Power Factor Correction (1Ø models)
Low conducted emissions
Low Ripple < 0.5%

Applications

Digital Projection
Film Projection
Stage Lighting
UV Sterilization
Search Lights
Solar Simulators
Medical Illumination
XLB Xenon Arc Lamp Power Supplies

<table>
<thead>
<tr>
<th>Model</th>
<th>Pout max</th>
<th>Iout max</th>
<th>V lamp</th>
<th>Input Voltage</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>XLB-650</td>
<td>650 watts</td>
<td>35 A</td>
<td>30V max.</td>
<td>100 to 240 VAC</td>
<td>8.9” x 5.8” x 2.7” 226 x 147 x 69mm</td>
</tr>
<tr>
<td>XLB-1000</td>
<td>1000 watts</td>
<td>50A</td>
<td>35V max.</td>
<td>200 to 240 VAC</td>
<td>10.6” x 8.2” x 3” 269 x 208 x 76mm</td>
</tr>
<tr>
<td>XLB-1500</td>
<td>1500 watts</td>
<td>75A</td>
<td>35V max.</td>
<td></td>
<td>13.0” x 8.5” x 3.4” 330 x 215.9 x 86.4mm</td>
</tr>
<tr>
<td>XLB-2500</td>
<td>2500 watts</td>
<td>120A</td>
<td>35V max.</td>
<td></td>
<td>17” x 16.6” x 3.4” 431 x 422 x 108mm</td>
</tr>
<tr>
<td>XLB-3000</td>
<td>3000 watts</td>
<td>150A</td>
<td>50V max.</td>
<td>200 to 440 VAC 3Ø (selectable)</td>
<td>17.3” x 16.6” x 4.25”</td>
</tr>
<tr>
<td>XLB-5000</td>
<td>5000 watts</td>
<td>170A</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Maximum output voltage is preset. Actual output voltage tracks the impedance of the lamp.

Specifications

Input Voltage: See table:
All input voltages ± 10%, 50/60Hz
Power Factor: >.98 (1Ø Models)
Efficiency: >80%

Interface
Connector: 15 Pin “D” Sub Female

Ignition/Boost
Boost Voltage: 250V
Boost Energy: 500 mj.
Ignition Voltage: Up to 45kV (~1uSec rise time)
Igniter Polarity: Positive or Negative (Factory Set)
Ignition Energy: 65mj.
Igniter Dimensions: (XLB-650/1000/1500/2500/3000) 5.5” x 3.6” x 2.6” 140 x 92 x 66mm
(XLB-5000) 7.0” x 4.625” x 2.5” 177 x 116 x 63mm

Performance
Line Regulation: <0.2% of maximum output current
Current Regulation: <0.5% of Maximum output current
Current Ripple: <0.5% of maximum output current
Power Limit: Limited to maximum power with power fold-back circuit

Environment
Operating Temp: 0 to 40°C
Storage: -25 to 85°C
Humidity: 0 to 95% RH non-condensing
Cooling: Forced air

Note: XLB-5000 can be upgraded to 7kW. Contact customer service for details. Units can also be paralleled for higher power applications.

Short Pulse high energy igniters operate from power supply output. Reliable automatic lamp ignition.

Also Available: The new MLB-series short-arc lamp power supplies designed with constant power output to operate Mercury lamps. Contact customer service or visit our website for more details.

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## Interface

<table>
<thead>
<tr>
<th>Pin #</th>
<th>Pin Name</th>
<th>Functional Voltage Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lamp On/Off (input)</td>
<td>High = RUN = +5V to +15V Low = OFF = 0V</td>
<td>The Lamp On/Off function is the control function which turns the lamp on and off. When the lamp is turned on, a trigger and boost sequence will ignite the lamp and deliver current as programmed via Iprogram, Pin 7.</td>
</tr>
<tr>
<td>3</td>
<td>Interlock (Input)</td>
<td>Open = OFF Connect to GND = RUN</td>
<td>The Interlock function can be connected to external interlock switches such as door or over-temp switches.</td>
</tr>
<tr>
<td>4, 9, 15</td>
<td>GND</td>
<td>Interface Return</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Vout Monitor (output)</td>
<td>0-10V = 0-Voutmax</td>
<td>The output voltage of the supply can be monitored by Vout Monitor. Note: See selection chart on page 2 for maximum output voltage setting per model.</td>
</tr>
<tr>
<td>6</td>
<td>Iout Monitor (output)</td>
<td>0-10V = 0-Ioutmax</td>
<td>The output current of the supply can be monitored by Iout Monitor.</td>
</tr>
<tr>
<td>7</td>
<td>Iprogram (input)</td>
<td>0-10V = 0-Ioutmax</td>
<td>The power supply output current is set by applying a 0-10V analog signal to Iprogram(+).</td>
</tr>
<tr>
<td>8</td>
<td>Lamp Status</td>
<td>High = lamp off = 15V Low = lamp on = 0V</td>
<td>The status of the lamp can be monitored using this pin</td>
</tr>
<tr>
<td>13, 14</td>
<td>+15V (output)</td>
<td>Auxiliary 200mA</td>
<td></td>
</tr>
</tbody>
</table>

### XLB Series Block Diagram

(power factor corrected models)

![XLB Series Block Diagram](image-url)
XLB Xenon Arc Lamp Power Supplies

Outline Drawings  (dimensions in inches)

XLB-650

XLB-1000/1500

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Outline Drawings  (dimensions in inches)

XLB-3000

10-32 PEM NUT ON CHASSIS BOTTOM, 4x (.35” max screw length into chassis)

1/4-20 TAP, THRU

AIRFLOW

* PEMs, SAME LOCATION OPPOSITE SIDE

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