

# XLB-6500 Xenon Arc Lamp Driver

6500 Watts with Igniter

## Features:

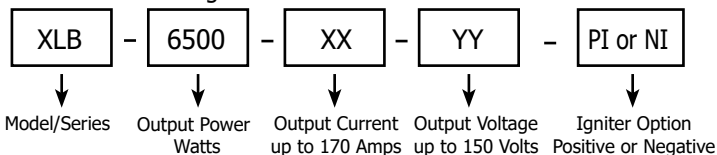
- **6500 watts output**
- **Low ripple current <0.5%**
- **Reliable short-pulse igniter**
- **Universal 3Ø input**
- **Analog interface**
- **CE Certified: UL 61010-1**
- **Low cost, compact size**

The XLB-6500 is a high-performance current source designed to operate and control Xenon short-arc lamps. The design features a high frequency inverter section for low ripple and reduced arc wander in the lamp. To properly start the lamp the remote igniter delivers a fast rise time, short pulse for reliable ignition and reduced lamp electrode wear.

The XLB-6500 features a user-friendly analog interface that allows for easy programming and monitoring of output settings, as well as advanced safety features such as over-voltage, over-current, and over-temperature protection.

This versatile and reliable Xenon arc lamp driver is well suited for medical and industrial applications where a stable light source is essential.

### Part Number Configurator

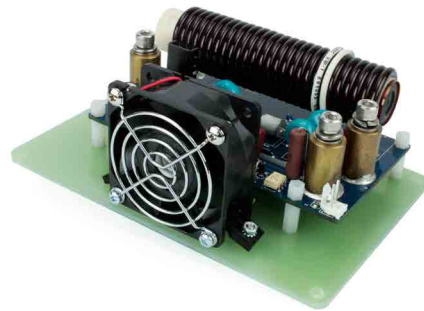


To complete the model description part number, please provide your required Max. Current for XX value and your required Max Voltage for the YY value and provide your required igniter polarity for either Positive or Negative.



## Applications:

- **Digital Projection**
- **Film Projection**
- **Stage Lighting**
- **UV Sterilization**
- **Solar Simulation**
- **Medical Illumination**
- **Search Lights**



Remote Short-Pulse Igniter



### Specifications

| Input                 |  |
|-----------------------|--|
| Voltage (Factory Set) | 200 to 240 $\pm$ 10%, 50/60 Hz, 3 $\emptyset$ or 380 to 440VAC, $\pm$ 10%, 50/60 Hz, 3 $\emptyset$ |
| Power Factor          | .90 @ 200Volts, .75@ 440Volts  |
| Efficiency            | >90%   |
| Leakage Current       | 1mA.   |
| Output                |  |
| Power                 | 6500 watts   |
| Current (Max.)        | 170 Amps   |
| Voltage (Max.)        | 150 Volts  |
| Performance           |  |
| Line Regulation       | <.2% of maximum output current   |
| Current Regulation    | <.5% of maximum output current   |
| Current Ripple        | <.5% of maximum output current   |
| Power Limit           | Limited to maximum power with fold back circuit  |
| Certification         | CE Certified; UL 61010-1 Issue:2012/05/11; Measurement, control, and lab use                       |

| Ignition/Boost    |  |
|-------------------|--|
| Ignition Voltage  | Up to $\sim$ 45kV ( $\sim$ 1 $\mu$ Sec, rise time)   |
| Ignition Energy   | 65mj.  |
| Ignition Polarity | Positive or Negative (factory set)                   |
| Boost Voltage     | Up to 275V   |
| Boost Energy      | 500 mj.  |
| Environment       |  |
| Operating Temp.   | 0 to 40°C  |
| Storage Temp.     | -25 to 85°C  |
| Humidity          | 0 to 95% RH non-condensing                           |
| Cooling           | Forced Air   |
| Dimensions        |  |
| Power Supply      | L17.3" x W16.57" x H4.25"<br>(439.4 x 420.9 x 108mm) |
| Igniter           | L7.0" x W4.625" x H2.5"<br>(177 x 116 x 63mm)        |

Maximum output voltage is preset. Actual output voltage tracks the impedance of the lamp. Units can be paralleled for higher power applications.

### Interface (15 pin D-Sub Female)

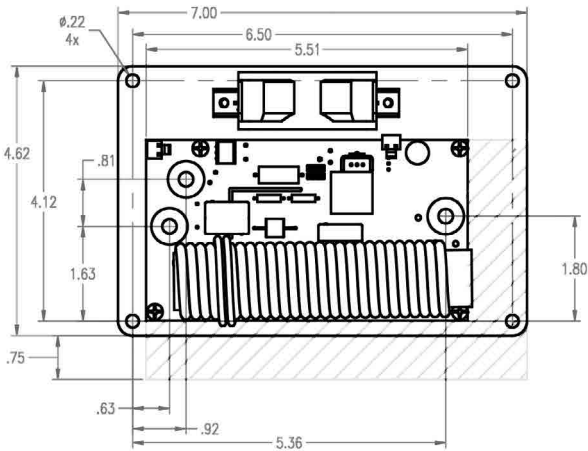
| Pin#   | Pin Name              | Functional Voltage Level                    | Description  |
|--------|-----------------------|---|--|
| 1      | Lamp On/Off (input)   | High = RUN = +5V to +15V<br>Low = OFF = 0V  | The Lamp On/Off function is the control function which turns the lamp on and off. When the lamp is turned on, a trigger and boost sequence will ignite the lamp and deliver current. |
| 3      | Interlock (Input)     | Open = OFF, Connect to GND = RUN            | The Interlock function can be connected to external interlock switches such as door or overtemp switches.  |
| 4,9,15 | GND                   |   | Interface Return   |
| 5      | Vout Monitor (output) | 0-10V = 0-35V                               | The output voltage of the supply can be monitored by Vout Monitor.   |
| 6      | Iout Monitor (output) | 0-10V = 0-Ioutmax                           | The output current of the supply can be monitored by Iout Monitor.   |
| 7      | Iprogram (input)      | 0-10V = 20%-Ioutmax                         | The power supply output current is set by applying a 0-10V analog signal to Iprogram.  |
| 8      | Lamp Status           | High = lamp off = 15V<br>Low = lamp on = 0V | The status of the lamp can be monitored using this pin   |
| 12     | -15V                  |   | Auxiliary 200mA.   |
| 13,14  | +15V (output)         |   | Auxiliary 200mA.   |



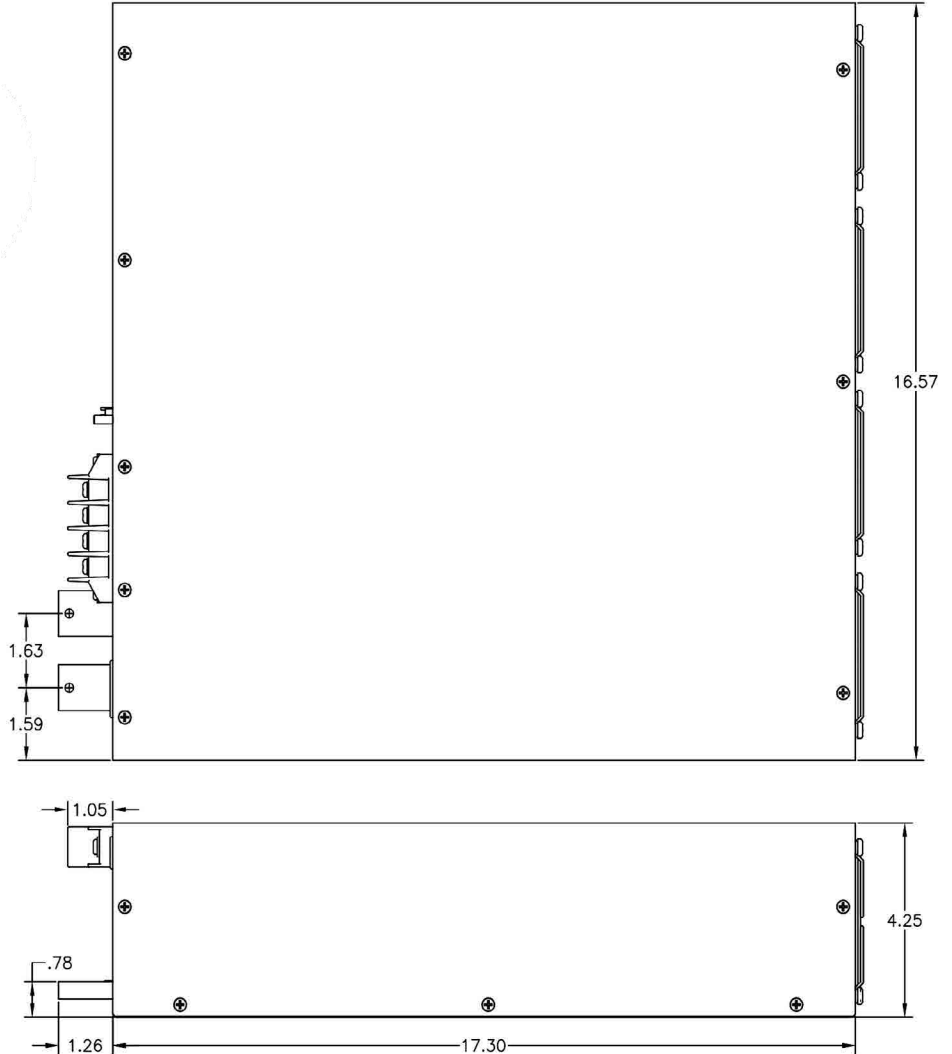
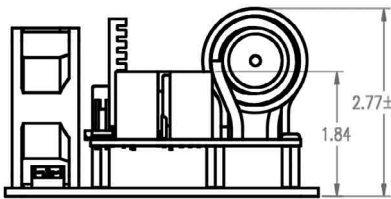
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## Outline Drawings



## Igniter



For more information on the proper installation and operation of the power supply and igniter please refer to the application notes: <https://luminapower.com/wp-content/uploads/2019/01/XLB-Application-Notes.pdf>