



UV Curing





Arc Lamp Equipment

Arc Lamp Power Supplies





Spectrofluorometers

Your contact:







Why Lumina Power?

Lumina is the largest supplier of OEM laser power supplies Our excellent pricing and fast delivery services earn us lifelong customers We offer the most complete line of high power Laser Diode Drivers Capacitor Charging power supplies with all popular options Xenon & Mercury Arc Lamp power supplies and "short pulse" ignitors Innovative custom products from prototype to volume manufacturing Reliable sales & technical support worldwide.

With experience in high voltage (>300kV) and high power (>150kW), our R&D department can adapt configurations from our library of power supply topologies to meet any requirement imaginable.

Lumina Power, Inc. manufactures a complete line of Capacitor Charging Power Supplies, Capacitor Chargers, laser diode drivers, laser power supplies and Xenon arc lamp power supplies. With over twenty-five years of cumulative power supply design and manufacturing expertise, Lumina Power is able to offer standard and custom laser power designs that solve challenging OEM applications and meet stringent agency safety and emission requirements. Lumina Power's products include high power laser diode drivers, capacitor charging power supplies and Xenon & Mercury arc lamp power supplies.



Arc Lamp Power Supplies

Xenon & Mercury Short-Arc Lamp Power Supplies



With arc lamp power supply models from 150W to over 7kW we have arc lamp power supplies for lamps offered by all major manufacturers world-wide. All models feature active power factor correction (single phase models) or universal 3 phase mains at 5kW and up. Compact switch mode design reduces size and improves the ripple spec to less than 0.5% on all models.

The XLB series lamp ballasts are offered in 7 sizes from 150 to 6000 watts and are constant current sources designed for precision operation of shortarc Xenon lamps. The MLB series Mercury lamp ballasts are offered in 5 sizes from 650 to 7000 watts.

With arc lamp power supply models from 150W to over 7kW we have arc

XLB Xenon Arc Lamp Power Supplies



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.



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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

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

Note: Maximum output voltage is preset. Actual output voltage tracks the impedance of the lamp. Higher output voltages available. THe XLB-650 can also operate lower power lamps from 150 through 500 watts. (see igniter options page 4)

Specifications

Input Voltage: All input voltages Power Factor: Efficiency:

See table: ± 10%. 50/60Hz >.98 (1Ø Models) >80%

Interface Connector:

Ignition/Boost

Boost Voltage: Boost Energy: Igniter Dimensions: (See interface description page 3) 15 Pin "D" Sub Female

250V

Ignition Voltage: Igniter Polarity: Ignition Energy:

Performance

Line Regulation: Current Regulation: Current Ripple: Power Limit:

Environment

Operating Temp: Storage: Humidity: Cooling:

500 mi. Up to 45kV (~1uSec rise time) Positive or Negative (Factory Set) 65mj. (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

<0.2% of maximum output current <0.5% of Maximum output current <0.5% of maximum output current Limited to maximum power with power fold-back circuit

0 to $40^{\circ}C$ -25 to 85⁰C 0 to 95% RH non-condensing Forced air



XLB-650/1000/1500/2500 /3000 Igniter



XLB-5000 Igniter

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.

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

MLB Mercury Lamp Power Supplies



The MLB series Mercury lamp ballasts are designed for the OEM customer. MLB power supplies provide a precise constant power output that will track the varying impedance of the mercury lamp for stable light output. Combined with our "Short Pulse" igniter the system is offered in a wide range of voltage and current combinations and will operate lamps from all manufacturers.

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 (1Ø models) and conducted emissions meet stringent European regulations. No additional line filter is required to meet EN 55011 emission requirements.

The MLB 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.



Advantages

Models from 650 to 5000 watts Constant Power Output Reliable "Short Pulse" Ignition Power Factor Correction (1Ø models) Low conducted emissions Low Ripple < 0.5%

Applications

Semiconductor Processing UV Sterilization UV Curing Medical Applications

MLB Mercury Lamp Power Supplies

Model	Pout max	lout max	V lamp	Input Voltage	Size
MLB-650	650 watts	35 A	15 to 150 V (Depending upon lamp model)	100 to 240 VAC	8.9" x 5.8" x 2.7" 226 x 147 x 69mm
MLB-1000	1000 watts	50A			10.6" x 8.2" x 3" 269 x 208 x 76mm
MLB-1500	1500 watts	75A		200 to 240 VAC	
MLB-2500	2500 watts	150A			13" x 8.5" x 3.4" 33.2 x 21.6 x 8.6 cm
MLB-3000	3000 watts	150A			17" x 16.6" x 3.4" 431 x 422 x 108mm
MLB-5000	5000 watts	170A		200 to 440VAC 3Ø (selectable)	17.3" x 16.6" x 4.25" 439 x 422 x 108mm

Specifications

Input Voltage:			
All input voltages			
Power Factor:			
Efficiency:			

See table: ± 10%, 50/60Hz >.98 (1Ø Models) >80%

Interface Connector: (See interface description page 3) 15 Pin "D" Sub Female

Ignition/Boost

Boost Voltage:250VBoost Energy:500 mj.Ignition Voltage: Up to 45kV (~1uSec rise time)Igniter Polarity:Positive or Negative (Factory Set)Ignition Energy:65mj.Igniter Dimensions:5.5" x 3.6" x 2.6", 140 x 92 x 66mm

Performance

Line Regulation:<0.2% of maximum output current</th>Current Regulation:<0.5% of Maximum output current</td>Current Ripple:<0.5% of maximum output current</td>Power Limit:Limited to maximum power with powerfold-back circuit

Environment

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

Note: MLB-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 XLB-series shortarc lamp power supplies designed with constant current output to operate Xenon lamps. Contact customer service or visit our website for more details.

For low power applications from 75 to 300 watts please refer to the XLB-150/300 data sheet.