

Research Grade Arc Lamp Power Supplies

60 I - series: 75W-300W

6 I I - series: 500W-1600W



Features

- Suitable for powering our LH and XLH series lighthouses
- Includes convenient touchscreen and computer controlled software to manipulate various aspects
 - Lamp
 - Shutter
 - Logging capacity
 - Temp. monitoring (optional)
 - Remote monitoring (optional)

Applications

- Coatings Durability Testing
- Photobiology
- Photochemistry
- Spectroscopy

Image: 6 I I -500 Power Supply for XLH Lamp Housings

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I. Introduction

Sciencetech's 601- and 611- series power supplies are compatible with Sciencetech's LH and XLH series lamp houses, respectively. Standard features include:

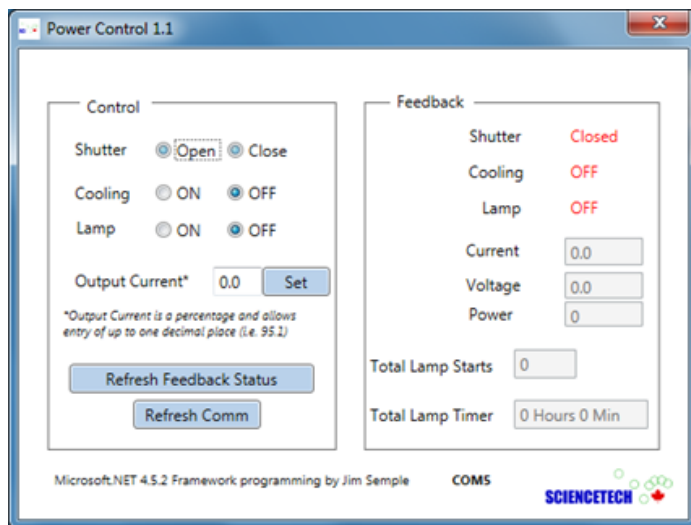
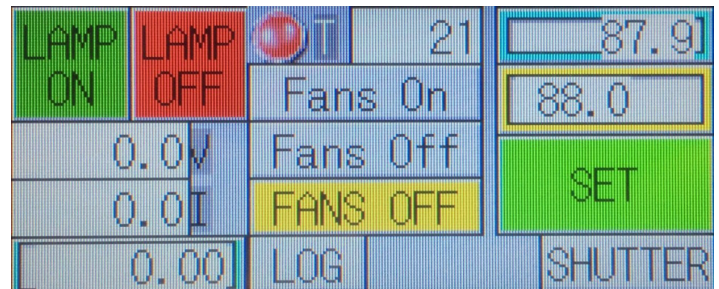
- A touchscreen interface
- Shutter¹ and exposure control (if electronic shutter is supplied*)
- Single connection for lamp power, cooling, and communication
- Integrated logging for lamp starts total running hours
- Fan cooling safety interlock
- RS232 computer control software GUI
- Auxiliary² rear panel 24VDC connection
- Free Software for power supply and lamp house control
- LabView drivers available on request



601- Series Power Supply

Optional Upgrades:

- Temperature monitor
- Optical feedback
- Remote lamp status monitoring
- Auto lamp starting
- External Igniter



Free control software

Notes:

1) High speed shutters require a separate controller
For ordering, ensure that your power supply model matches your system's arc lamp wattage.

2) Additional interlock can be wired to auxiliary connector on request

Lamp Housing Series	Bulb Types		Power Supply Model
LH	-075X	-075X	601-075
	-100X	-100X	601-100
	-150X	-150HX	601-150
	-300X	-300HX	601-300
XLH	-500X	-500HX	611-500
	-1000X	-1000HX	611-1k
	-1600X	-1600HX	611-1.6k

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2. Specifications

601- and 611- Series Power Supplies						
Model	601-075	601-150	601-300	611-500	611-1K	611-1.6K
Part Number	150-9103	150-9101	150-9100	150-9150	150-9151	150-9152
Types of Lamps	Xe, HgXe					
Input Voltage (AC)	100-240				208-240 ⁴	
Current Requirement (AC)	5A	5A	5A	10A	10A	15A
Output Current, Adjustable (A)	4-6	8-12	15-20	10-35	10-55 ⁴	10-75
Nominal Power (W)	75	150	300	500	1000	1600
Efficiency	> 80%					
Stability	<0.5%					
Line Regulation	<0.2%					
Current Ripple	<0.5% of maximum output current					
Ambient Operating Temperature	0°C-40°C (32°F-104°F)					
Ignition Voltage	21kV			>30kV		
Cooling Fan Interconnection	Yes					
Dimensions (mm)	88 × 330 × 430			140 × 330 × 430		
Weight (kg)	6			7.5		
Notes	¹ Limited to maximum power with power fold-back circuit ² All models are constant current power supplies ³ Igniters are not built into either the 601 or the 611 power supply series, please see our external igniter options. ⁴ A 120VAC version of the 611-1k supply is available with reduced current output (50A)					



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3. Configuration

Additional features can be added to the 601- and 611-series power supplies. Select from the options below or ask one of our technical salespeople about your custom requirement.

601- and 611- series Power Supply Options		
Upgrade Option	Code	Description
Programmable Remote Temperature Monitor	/TM	The programmable remote temperature monitor option provides over temperature protection for the lamp house that the power supply is being used with. With this option, an RTD or K-type Thermocouple is wired between the lamp house and power supply. A programmable temperature sensor with relay output is used to program a maximum lamp house temperature. This option ensures that if the cooling fans fail or the temperature inside the housing rises to a dangerous level the power supply will be shut off extinguishing and saving the lamp from catastrophic failure.
Monitor Output	/OC	This option provides a male nine pin connector on the rear of the power supply for monitoring the status of the power supply. Parameters that can be monitored: lamp current 0-10V, lamp voltage 0-10V, lamp On/Off (1-5V TTL).
Auto Start Lamp	/AS	The option provides the capability to automatically start the lamp. This allows the user to set a time for the light source to automatically ignite.
Light Intensity Stabilizer	FS-02-N	The FS-02-N option integrates a feedback board into the power supply. If purchased with a Sciencetech lamp house (LH or XLH series) an optical detector is also integrated inside the lamp house to integrate with the feedback electronics.
External Igniter	601-EXIGN 611-EXIGN	To use the 601 or 611 series supplies with a legacy Sciencetech lamp house (201-100) or third party lamp house requires an external igniter. For the 601 series supplies pick the 601-EXIGN product. For the 611 series supplies pick the 611-EXIGN product

601/611/EXIGN External Igniters

The 601-EXIGN and 611-EXIGN are external igniters designed for the 601 and 611 series power supplies, respectively.

These products come supplied with a standard 6' cable to connect to the power supply. The output of the igniter is two 20" long hard wired high voltage rated cables for attaching directly to a lamp anode and cathode terminals. Extending the HV cables is not recommended.

The EXIGN products are designed to be used with legacy Sciencetech lamp houses or custom or third party Xenon, Hg, or Xe-Hg lamp houses. Please indicate the intended use at time of order.

WARNING! HV is very dangerous. The 601-EXIGN is capable of delivering a 21kV pulse. WARNING! HV is very dangerous. The 611-EXIGN is capable of delivering a >30kV pulse.



FS-02-N Light Intensity Stabilizer

The FS-02-N integrates with Sciencetech's 601 and 611 range of power supplies. The FS-02-N feedback board is integrated into the power supply. A feedback cable connects the board to an electro-optical circuit inside a Sciencetech LH or XLH lamp house (also available with some solar simulator and custom light source products).

With the FS-02-N you can program the 601 or 611 power supply to securely maintain the current optical power level. The FS-02-N system will monitor the optical power level inside the lamp house and adjust the power supply current to maintain that optical power.

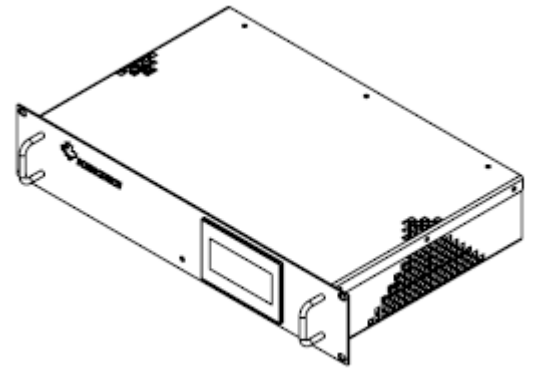
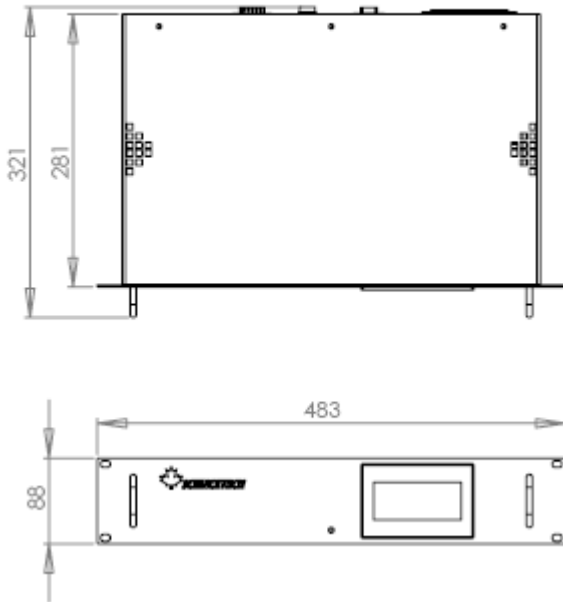
The FS-02-N is capable of maintaining stable power levels for long periods of time. The stabilizer does not improve the short term stability of the lamp. Sample data can be provided upon request.

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4. Dimensions (mm)

60I Series



61I Series

