

Solar Light's **Model XPS-1600 Power Supply** is a highly stable current source for xenon short arc lamps which is specifically designed to work with our LS1000-Series Solar Simulator models, and features mains operation from 200-240VAC. The rear panel has connection points for lamp power, chassis safety ground, 24VDC fan power, a normally closed fault loop circuit, 24VDC solenoid driver, and signal lines indicating shutter and filter operating positions.

The XPS-1600 is power regulated and power limited to simplify operation. A single front panel knob determines the power setting for the lamp, and a connector supports PMA/DCS meter options and access to 24VDC shutter control. The internal ignition counter stops the automatic ignition cycle after approximately 5 attempts.

An external fault loop is used to provide thermal shutdown in the event of a lamp overheating or the fan failing. The fault loop circuit provides an intrinsically safe, normally closed circuit for remote sensing elements such as interlock switches, thermal switches or vacuum sensors. The system will not restart until the lamp enable switch is reset.

Output is short circuit protected and "arc to ground" protected. The power supply chassis is internally protected with a thermal shutdown feature if the internal temperature exceeds 90°C.



### Controls & Indicators:

- ON/OFF Rocker Switch (*Automatically Initiates Ignition Cycle on Rear Panel*)
- Lamp Enable Switch
- Manual Shutter Control Switch
- Lamp Power Adjustment Potentiometer
- 4 LED Indicators Showing Power ON, Lamp Running, System Fault & Ignition Failure
- Lamp Hour Display
- Rear Panel Mounted Lamp Hour Reset
- PMA DCS Interface Connector

### Configurations

The XPS-1600 power supply comes with the line cord as specified by the customer. Mains operation from 200VAC to 240VAC nominal.

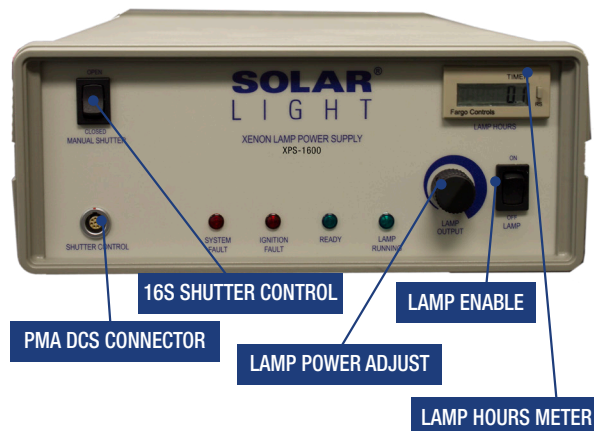
| SPECIFICATIONS                 |  |
|--------------------------------|--|
| <b>Power Requirements:</b>     | 200 – 260VAC, 50 – 60Hz, 2.5 Amps max. |
| <b>Lamp Power Adjust Range</b> | 250W to 1600W                          |
| <b>Output Voltage Range</b>    | 15 to 29V                              |
| <b>Lamp Power Stability</b>    | <1% after 5 minute warm up             |
| <b>Line Power Factor</b>       | 0.92-1.00                              |
| <b>Operating Temperature</b>   | 25°C Recommended, 5 – 50°C Range       |
| <b>Ground Leakage Current</b>  | <3.5mA                                 |
| <b>Dimensions</b>              | 10.75 x 5.5 x 9.5" (27 x 14 x 24cm)    |
| <b>Weight</b>                  | 8.9lbs (4.1kg)                         |

Part Number: 210093

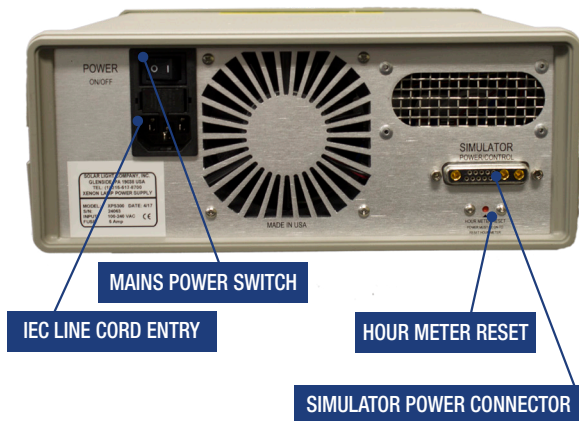
Revision Level: B

Specifications subject to change without notice.

XPS Power Supply Front Panel



XPS Power Supply Rear Panel



Since 1967, Solar Light Company, LLC has been recognized worldwide as America's premier manufacturer of Precision Solar Simulators and Light Sources, Light Measurement Instrumentation, UV Transmittance Analyzers, Meteorological Instrumentation, and Digital and Analog Sensors. Our advanced line of UV, visible, and IR radiometers and light meters measure laboratory, industrial, environmental, and health related light levels with NIST traceable accuracy. Column ozone, aerosol, and water vapor thickness measurements, in addition to long-term global ultraviolet radiation studies all over the world are performed using our atmospheric line of instrumentation. Solar Light also provides NIST traceable spectroradiometric analyses, calibrations for light meters and light sources, accelerated ultraviolet radiation degradation testing of materials, and OEM instrumentation and monitors. Please visit our website for more details, specifications, and pictures!



**State Of The Art Solar Simulators** available in 150-1000+ watt UV or AM variations for a variety of applications including PV Cell Testing, Materials Testing, Pre-Irradiation for *In Vitro* Broad Spectrum Sunscreen Testing, SPF Testing, and much more.



**Multi-Functional Professional Grade Radiometers** available with and without data logging, and compatible with over 130 Solar Light PMA-Series Sensors to measure UV, Visible and IR wavelengths. Specialty Meters also available to measure UV Radiation, SUV/UVA, Scotopic/Photopic Spectra, and much more.



**Advanced NIST-Traceable Sensors** for accurate measurement of UVA, UVB, UVA+B, UVC, Visible, IR, Photostability, Temperature, and Custom Wavelength – well over 130 models in both digital and analog configurations, all compatible with our Radiometers.



**Ultraviolet Transmittance Analyzers** available as complete integrated turnkey systems to meet the latest ISO24443 requirements.



**Handheld Ozonometers and Sunphotometers** for fast and dependable Column Ozone, Aerosol, and Water Vapor Thickness measurements, in addition to long-term global ultraviolet radiation studies.