



Solarlux™ Electronic Systems



Power/Control Ballasts

Time stability for continuously powered lighting sources can only be achieved by the use of properly designed electronics. EYE Lighting / Iwasaki Electric designs and manufactures lighting electronics along with the lighting source (lamp) to create a fully integrated solar simulation solution. All EYE Lighting / Iwasaki solar simulation systems meet ASTM/IEC Class A standards for temporal stability.

- Proprietary Design: Designed to perfectly match EYE Lighting / Iwasaki solar lamps for maximum performance and efficiency
- Square Wave / Inverter Power: Ensures flicker free stable lighting to meet IEC Class A temporal stability standards
- Controllable Output: Provides irradiation power adjustment for application flexibility
- Modular Design: Offers cost effective expansion for open array systems

Applications

- Continuous Irradiation Open Array PV Test Systems
- Large Area Solar Array Automotive SC03 Testing
- Multi-use Solar Simulation Chambers; IEC class CCA to BBA
- High Speed Photography Lighting



APPLIED OPTIX™

Solarlux™ Electronic Systems

Power/Control Ballasts

When designing high output arc tube lighting systems, it is critical that the power ballast is designed specific to the application and lighting source. Many lighting systems use standard core and coil or inexpensive electronic ballast components that introduce sine wave or square wave cycling into the lamp arc. For commercial lighting, this is not an issue as the human eye does not perceive this illumination fluctuation. The performance of solid state devices (PV cells), however, can be adversely affected by this cycling, which can prevent repeatable data acquisition results.

EYE Lighting / Iwasaki has developed a complete family of electronic ballast systems to provide the best price / performance solutions for your solar simulation needs. Our solar simulation systems are designed from inception around the proper lighting system to ensure outstanding, yet efficient, spectral performance, irradiation uniformity, and time stability.

This 4000W electronic control ballast is used in both large solar array and high speed photography systems. It provides outstanding stability for filming at rates above 5000fps.



Display of power output from EYE Lighting / Iwasaki electronic inverter ballast.



High speed photography applications demand extreme light stability to achieve high resolution along with the required depth of field.

SYSTEM FLEXIBILITY

This multi-use solar simulation chamber is designed to handle four (4) typical 60cm x 120cm PV panels in one batch. Uniquely, it can be configured using EYE Lighting / Iwasaki's proprietary ASTM/IEC Class BBA continuous lighting system.

This single chamber is an ideal laboratory test system providing unequalled flexibility in a minimum floor area. It meets ASTM/IEC standards for light soaking/aging, STC/NOCT performance, hot spot testing, and max power determination using a portable I-V curve tracer.

EYE Lighting/Iwasaki solar lighting experience provides the expertise to assist you in the development of solar simulation systems specific to your application requirements.

We welcome the opportunity to work with you to solve your application requirements.



EYE LIGHTING INTERNATIONAL

EYE Lighting International of North America, Inc.

a division of Iwasaki Electric of Japan

9150 Hendricks Road
Mentor, Ohio 44060

Tel: (888) 665-2677
Fax: (440) 350-7001

www.eyesolarlux.com