



# APPLIED OPTIX™

## Solarlux™ Solar Simulation Systems



### PV Performance Test Systems

- Innovative Optical System: EYE Lighting/ Iwasaki proprietary Class A Xenon filtered light source optimizes system performance ensuring accurate and repeatable measurements.
- Modular Design: matches system size to module requirements saving critical manufacturing space.
- High Speed Production Mode: reduced cycle time (10sec) can increase production throughput by 50%.
- Programmable Pulse Width: provides flexibility to meet panel technology and process requirements.
- Lab or Production: Performance and flexibility allows system to be used stand-alone in your development lab or integrated with upstream/downstream systems in your manufacturing process.
- Comprehensive Software Solution: Integrated MS-Windows based software provides system control, I-V test and performance calculations, and system interface with production equipment; PV performance data can be easily integrated with your process system.
- True four (4) lead I-V measurement system; high output Bi-Polar power supply provides capability to perform Dark I-V measurements.

### Applications

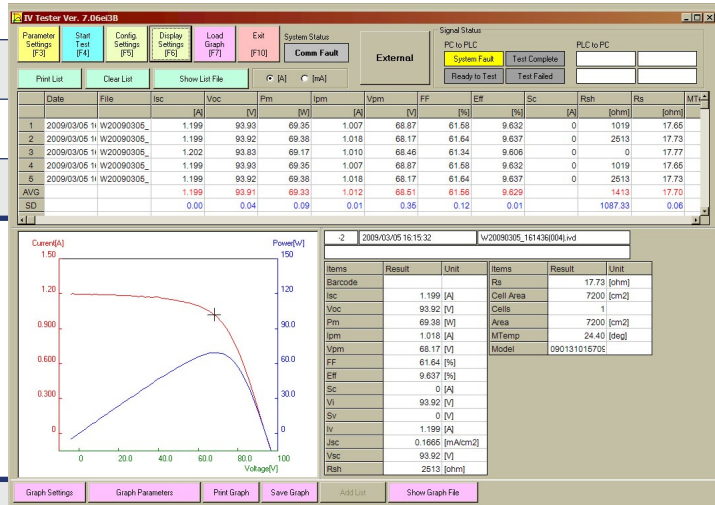
- Laboratory PV Performance Testing
- Crystalline or Thin-Film Production Testing
- Solar Cell Development



## Solarlux™ Solar Simulation Systems

### PV Performance Test Systems

| Part # | Description   |
|--------|---|
| 93608  | XLP-8 Xe Long Pulse Class AAA PV Module Solar Simulation System; 0.6m x 1.2m  |
| 93616  | XLP-16 Xe Long Pulse Class AAA PV Module Solar Simulation System; 1.1m x 1.4m |
| 93624  | XLP-24 Xe Long Pulse Class AAA PV Module Solar Simulation System; 1.1m x 2.0m |



The industry leading proprietary lamps, optics, and electronics used in these systems represent the culmination of 60 years applied lighting technology expertise.

### Basic Specifications

- Maximum Module Size:**
  - XLP-8 600mm x 1,200mm (24in x 48in)
  - XLP-16 1,100mm x 1,400mm (43in x 55in)
  - XLP-24 1,100mm x 2,000mm (43in x 79in)
- System Dimensions:**
  - XLP-8 - L 1,580mm x W 1,080mm x H 880mm (62in L x 43in W x 35in H)
  - XLP-16 - L 1,880mm x W 1,580mm x H 880mm (74in L x 62in W x 35in H)
  - XLP-24 - L 2,680mm x W 1,580mm x H 880mm (105in L x 62in W x 35in H)
- Lamp Type:** EYE/Iwasaki proprietary Class A pulsed Xenon lamp
- Pulse Width:** Maximum pulse width of 120msec (effective pulse width 100msec)
- Irradiation Output Power:** 1.0 sun nominal 1000W/m<sup>2</sup> per IEC AM 1.5 global; controllable from 0.7 sun to 1.1 sun
- Spectrum:** conforms to IEC and ASTM Class A standards
- Irradiated Time Stability:** 1% instability exceeds IEC and ASTM Class A standards
- Irradiated Area Uniformity:** 2% ; conforms to IEC and ASTM Class A standards
- 4 Lead IV Curve Tracer:** Measurements and calculations include I-V, Isc, Voc, Pm, Ipm, Vpm, FF, Jsc, Vsc, Rsh, η (efficiency), averaging and standard deviations
- Dark I-V test capable**
- Measurement Interval:** 100μs/point
- Measurement Points:** 30 to 1000 points
- Total Processing Time:** 10sec per test
- Production Throughput:** up to 360 modules/hr
- System Power:** Three phase 208V AC; 15A/30/45

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**

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