

- Solar simulator for duration tests
- Simple test system with SOLAX



#### ■ Solar simulator for duration tests

*Model	SML-2K1A
*Lamp type (Qty)	2kW Metal halide lamp (1ea)
*Irradiance area	300×300mm
*Irradiance	1kW/m <sup>2</sup> ≤
*Non-uniformity of irradiance	≤ ±10%
*Temporal instability	≤ ±3%
*Adjustment range of irradiance	50~100% (Single step)
*Weight	150kg



#### ■ Simple test system with SOLAX

*Model	SXL-500V2
*Lamp type (Qty)	Solax XC-500EFSS (1 ea)
*Irradiance area	φ100mm / 100×100mm
*Irradiance	1kW/m <sup>2</sup> ≤
*Non-uniformity of irradiance	≤ ±5% / ≤ ±10%
*Temporal instability	≤ ±4%
*Adjustment range of irradiance	50~100% (Single step)
*Weight	45kg

#### ■ Consumables

Solar simulators for Cells	Model	Lamp type	Qty/system *1
50×50mm	XIL-01B50KP	140W Xenon lamp	1 ea
80×80mm	XIL-05B80KP	500W Xenon lamp	1 ea
100×100mm	XIL-05B100KP	500W Xenon lamp	1 ea
156×156mm	XIL-05B156KP	500W Xenon lamp	1 ea
156×156mm	XIM-1B156KP	1000W Xenon lamp	1 ea
210×210mm	XIL-1B210KP	1000W Xenon lamp	1 ea
210×210mm	XIM-3B210KP	3000W Xenon lamp	1 ea
300×300mm	XIM-3B300KP	3000W Xenon lamp	1 ea
<b>Solar simulators for Modules</b>			
Continuous type solar simulator	SHR-50KA	2000W Metal halide lamp	20 ea
Solar simulator for duration test	SML-22KP	2000W Metal halide lamp	9 ea
<b>Others</b>			
Solar simulator for duration test	SML-2K1A	2000W Metal halide lamp	1 ea
Simple test system with SOLAX	SXL-500V2	500W Xenon lamp	1 ea

\*1 Qty refers to the number of lamps required per replacement.

#### Sales |

Customers include: Universities/National laboratories/Automobile manufacturers/ Electronics manufacturers/Chemical companies/Building material manufacturers

Usages include: Photo voltaic cell tests/Duration tests/Evaluation of rocket parts

#### Contact

Please feel free to contact us with any inquiries.

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# Solar Simulator

Solar Simulators for Cells/Modules

SERIC Ltd. is the only company in Japan to offer artificial solar illumination lamp technology and can provide the optimum solar simulator no matter what your requirements are.

SERIC has supported the development of solar batteries through artificial solar illumination lamp technology for over 25 years.



<https://www.en.serico.co.jp/>





Providing customer satisfaction

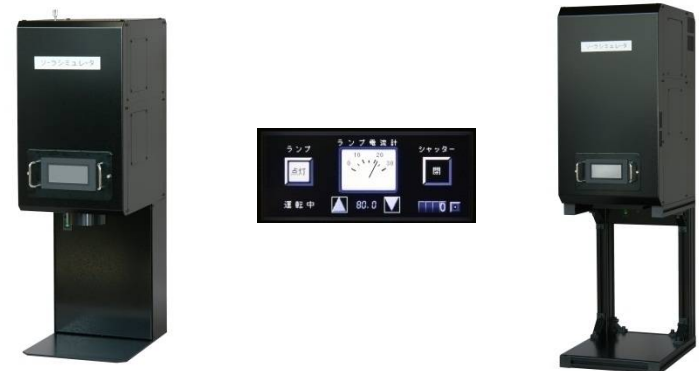
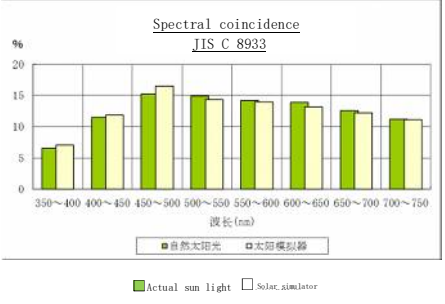
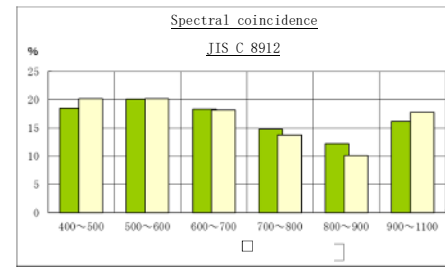
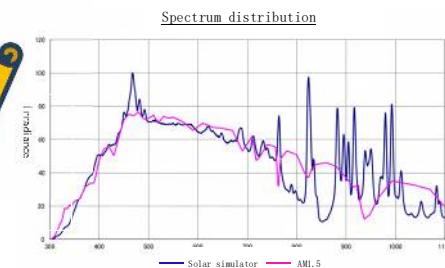
Guaranteeing the best after sales service to our customers

Guaranteeing the lowest cost and the most compact devices

**SERIC SOLAR SIMULATORS for Cells**



- 01** • Extensive line up  
Irradiance area : 50×50mm~300×300mm
- 02** • JIS C 8912/8933 Class AAA  
• Angle of incident light : within 1°
- 03** • Easy touch panel operation



☐ 50 × 50mm Solar simulator      ☐ 156 × 156mm Solar simulator

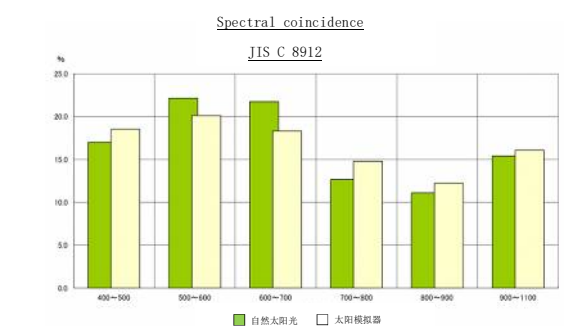
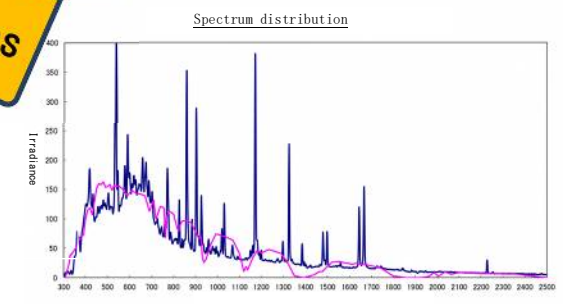
Irradiance area	☐ 50mm	☐ 80mm	☐ 100mm	☐ 156mm	☐ 210mm	☐ 300mm
Model	XIL-01B50KP	XIL-05B80KP	XIL-05B100KP	XIL-05B156KP	XIM-1B156KP	XIM-3B300KP
Type	Desktop			Stand alone with Casters		
Lamp type	Xenon Lamp					
Lamp power	140W	500W		1000W	3000W	
Average lamp life	1500h	1000W				
Irradiance	1000W/m <sup>2</sup>					
spectral characteristics	AM1.5G					
Maximum incident angle of irradiated surface	within 5°	within 5°	within 5°	within 10°	within 3°	within 3°
Irradiation distance	Approx 160mm	Approx 230mm	Approx 200mm	Approx 260mm	Approx 300mm	Approx 260mm
spectral coincidence	CLASS A					
Temporal instability of irradiance	CLASS A					
Positional non-uniformity of irradiance	CLASS A					
Electric Power Supply	1 φ 100/200V				3 φ 200V	
External dimensions (mm)	870×280×360	1200×350×420	1200×350×420	1200×550×420	1900×500×1000	2115×640×1500
Weight (kg)	40	60	60	60	150	300

- 1 All solar simulators have a feedback function
- 2 Size and weight may change without prior notice
- 3 Average lamp life is based on non-stop operation

**SERIC SOLAR SIMULATORS for Modules**



- 01** Flexible irradiance direction : Horizontal  
Down shine  
Up shine
- 02** Flexible customization according to module size, installation space etc
- 03** Flexible specification (grade) depending on your budget



SERIC offers a variety of solar simulator grades from standard up to Class AAA

Specification

■ Continuous type solar simulator

- Model SML-50KA
- Irradiance area W1.8×H1.5m
- Number of lamps 2kW Metal halide lamp 20 ea
- Irradiance 1kW/m<sup>2</sup>
- Spectral characteristics AM1.5G
- Spectral coincidence JIS C 8912 A
- Temporal instability JIS C 8912 A
- Non-uniformity of irradiance JIS C 8912 A
- Irradiation distance 3m
- Direction of irradiance Horizontal

■ Solar simulator for duration test

- Model SML-22KP
- Irradiance area W1.8×H1.5m
- Number of lamps 2kW Metal halide lamp 9 ea
- Irradiance 1kW/m<sup>2</sup>
- Spectral characteristics AM1.5G
- Spectral coincidence JIS C 8912 B
- Temporal instability JIS C 8912 A
- Non-uniformity of irradiance JIS C 8912 C
- Irradiation distance 1260mm
- Direction of irradiance Down shine

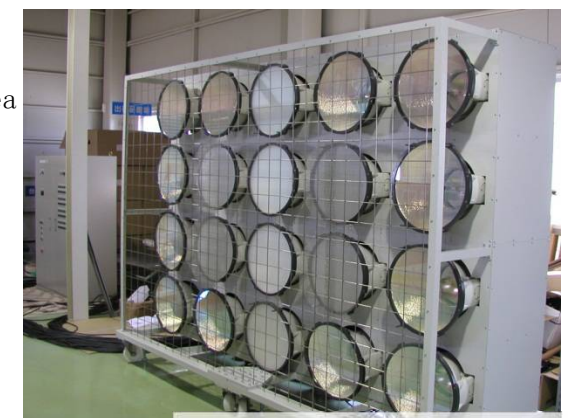


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※ SERIC Ltd. offers both temperature and humidity test chambers and light sources system.