

# SS - 3200

Production Line Solar Simulator



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

**Analytical Technologies Limited**

An ISO 9001 Certified Company

[www.analyticalgroup.net](http://www.analyticalgroup.net)

## ►► Description:

ATL Technology would like to introduce our latest product - 200 mm x 200 mm Production Line Solar Simulator. which is designed to measure high efficiency solar cells. SS-3200 can do the Busbar-free solar cell measurement automatically. The flash time of this solar simulator can be 10 ms-1 sec adjustable along with the high speed (low cycle time <0.5 sec) and 10 ms-1000 ms pulse width. For the industry filed, ATL Technology also offer customized production line to fit all customers' requirements and enhance the measurement efficiency, such as automatic integrated instrument with loading and unloading function or sorting machine.

## ►► Features:

### High Performance

- A+AA+ Xe lamp solar simulator
- Repeatability  $\leq \pm 0.1$  %
- EL testing

### Accurate Test for high Voc and high efficiency cell

- 10~1,000 ms pulse width
- Suitable for solar cell with Voc up to 750 mV

### High-Speed

- 4 synchronous 16-bit channels
- Low cycle time < 0.5 sec
- Max throughput 7200 w/h

### Flexibility

- Support 3BB, 4BB, 5BB, MBB, 0BB cell contact

## ►► Specification :

SS-3200	
A+AA+ Xenon Solar simulator	
Spectrum Match	AM1.5 G, $\leq \pm 12.5$ %, class A+
Non-Uniformity of irradiance	$\leq \pm 1.5$ %, class A
Temporal Instability	$\leq \pm 1$ %, class A+
Illumination area	200 mm x 200 mm
Pulse Width	10ms~1,000 ms
Lamp lifetime	>1,500,000 @ 1,000 ms pulse width
Through-put	Max 7200 w/h @ 150 ms pulse width
Min Cycle time	0.5 sec @ 150 ms pulse width
Irradiance Range	100~1200 W/m <sup>2</sup>
Multi-level IV curves test <700 ms (under 5 levels from 100~1000 W/m <sup>2</sup> @ 100 ms pulse width)	

<b>IV Curve Tracer</b>	
4 synchronous 16-bit channels for voltage, current, irradiance and temperature	
Measurement resolution	<0.004 % FSR
Measurement accuracy	<0.05 % FSR for current and voltage
Voltage measurement range	$\pm 20\text{ V} / \pm 10\text{ V} / \pm 5\text{ V} / \pm 2.5\text{ V} / \pm 1.25\text{ V}$
Current measurement range	$\pm 16\text{ A} / \pm 8\text{ A} / \pm 4\text{ A} / \pm 2\text{ A} / \pm 1\text{ A}$
Power Repeatability (STD)	$\leq \pm 0.5\%$
Open Circuit Voltage Repeatability (STD)	$\leq 0.1\%$

<b>IV Curve Software and Contact</b>	
Test parameters	Isc, Voc, Ipm, Vpm, Pmax, FF, Eff, Rs, Rsh
Output curves	IV curves, Pm curve
Isc    Voc, Voc    Isc scanning	
Temperature correction	
Irradiance correction (auto and simultaneously)	
Implemented PLC and MES interfaces	
3BB, 4BB, 5BB, MBB, 0BB test fixtures	

## Regulatory compliances



## Corporate Social Responsibility

Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



**Analytical**  
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1. Research & Innovation Scientist's awards/QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personalities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at [Info@analyticalfoundation.org](mailto:Info@analyticalfoundation.org)

2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXYFY human minds,souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

## Reach us @



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