

The Premium LED Based Sun Simulator

Class A++A++ flasher for IV measurement

Nexun Pro

Full LED Technology

Shortest cycle time, no consumables, best stability

Long Pulse for PERC & HJT

Measure the most capacitive technologies of today & tomorrow

Largest Area for LED Technology

Standard 1500 X 2700 mm, up to 4000 X 4000 mm

Best Repeatability

< 0.05% Pmax repeatability

Long Pulse For The A+A+A+ Class

500 ms at a LTI of 0.3%

5-15 s Cycle Time

Highest throughput

Optional Thermal Chamber

Fully automatic TC measurement



Specifications

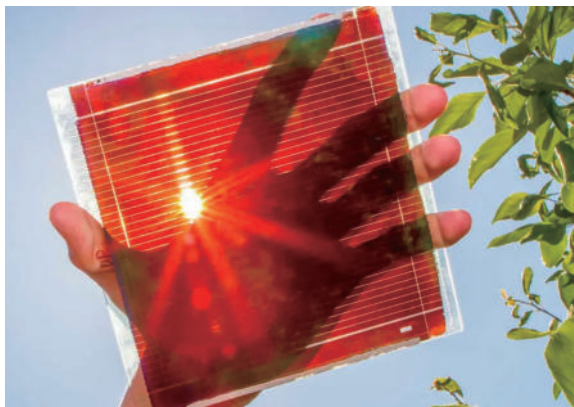


IEC60904-9:2020	A++ A+ A++
Spectral Match	< ±10%
Spectral Deviation (SPD)	~35%
Spectral Coverage (SPC)	> 97%
Non-Uniformity	± 1%
Pulse Length	20-500 ms
Cycle Time	5-15 s
Technologies	PERC, HJT, TOPCON, Bifacial



TÜVRheinland®

Nexun Perovskite



Designed for Perovskite

The Nexun Perovskite is a solar simulator that includes a

- steady-state preconditioning light source and
- an A++A+A++ 500 ms pulse flash

The switch from the steady-state light source to the A++A+A++ pulse is instantaneous.

It combines the necessary preconditioning requirements while providing an A++A+A++ spectrum & uniformity for the IV measurement.

The steady-state light source can be customized to match the spectral response of the Perovskite device.

Nexun Cosmo-AM0 Solar Simulator



The AM0 system with deep IR and tailored for the measurement of triple and quadruple junction cells and panels at AM0 for spatial applications.

- AM0 - 1367 W/m² with adjustable spectra & irradiance: AM0, Mars, ...
- 300 - 2000 nm thanks to patented LED-Tungsten hybrid technology.
- Multiple channels for Isocells with automated, per junction calibration for 3J and 4J.
- Adjustable junction cross-over spectrum within the LED range for precise calibration.

Steady-State Solutions

Cost effective and low maintenance solution for demanding applications with either full LED for the highest performances, or patented Tungsten-LED hybrid for cost effectiveness.

- Full LED or patented Tungsten-LED hybrid technology
- Up to A+A+A+ with full LED
- Tuneable spectrum and intensity
- Low footprint, large area
- Load with realtime measurement, MPPT/Isc/Voc

Automated Uniformity Robot

Don't waste time anymore, the fully automated uniformity robot maps the area automatically in a few minutes! Even better, the software is able to self-adjust the uniformity, ensuring the best measurement.

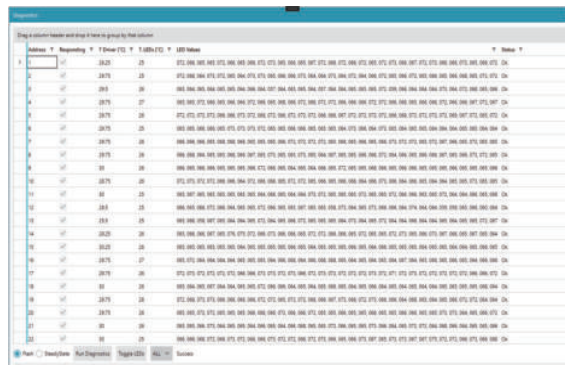
Available for both vertical and horizontal design.



Diagnostic System

AUTO DIAGNOSTIC

Ensure the system's proper operation with the integrated diagnostic system where each LED string is measured and checked to detect any faulty LED or issue in the driver unit.

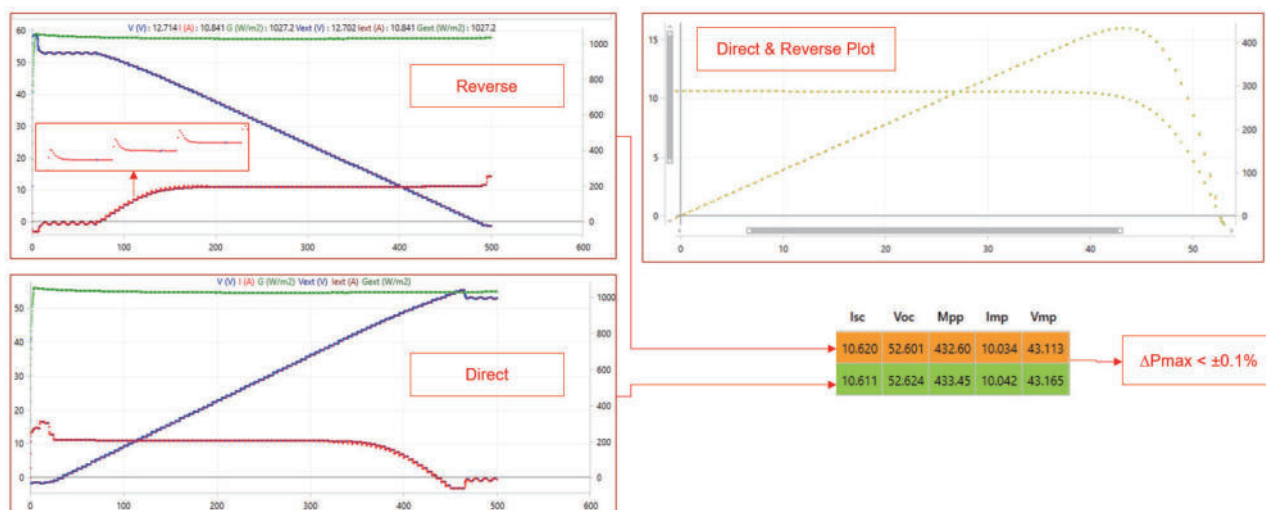


VISUAL INSPECTION

It is also possible to illuminate the LED at low intensity per channel, allowing a rapid visual inspection.

HJT & Dynamic IV

With its 500 ms pulse and the Dynamic IV, no HJT will ever need more than a single flash to be accurately measured. The bi-directional Dynamic IV technology and 500 ms pulse mean 100 points with each 5 ms stabilization, allowing an accurate measurement of the most capacitive technologies without complex fitting algorithm or curve shaping.



Nexun Ultra



Beat Uncertainties

The lowest uncertainties thanks to its A+++A++A+++ rating, going beyond IEC 60409 requirements:

	IEC 60904-9 Ed. 3	Nexun Ultra	Class Equivalence
	A+A+A+	A+++A++A+++	
LTI	$\pm 1\%$	$\pm < 0.2\%$	A+++
Spectral Bands	$\pm 12.5\%$	$\pm < 3\%$	A+++
Non-Uniformity	$\pm 1\%$	$\pm < 0.5\%$	A++

Invest in the Future with the Ultimate Tool

The Nexun Ultra features the best spectrum on the market for a full LED system with the lowest spectral deviation, thanks to 37 LED types and 32 channels per 15 x 15 cm board area.

Largest Area for LED Technology

Available with an active illumination area up to 1800 x 3000 mm, get covered for the biggest panels to come. On a budget? No worries, we can provide a bigger frame and increase the area later!

Long Pulse for the A+++A++A+++ Class

At 500 ms, with an LTI down to 0.1%, combined with the dynamic IV, measure the most capacitive technologies like the latest HJT.

Long Pulse for PERC & HJT

The Nexun Ultra has a pulse length of up to 500 ms, allowing you to measure even the latest, most capacitive HJT panels in a single flash!

Specifications

	Guaranteed	Achievable
IEC 60904-9:2020 Ed. 3	A++ A++ A++	A+++ A++ A+++
Ed. 3 Spectral Match	$< \pm 6\%$	$< \pm 3\%$
Ed. 3 Spectral Deviation (SPD)	$< 23\%$	$< 21\%$
Ed. 3 Spectral Coverage (SPC)	$> 97\%$	$> 97\%$
Spatial Non-Uniformity	$< \pm 0.5\%$	$< \pm 0.5\%$
Pulse Length	50 - 500 ms	
Cycle Time	1 - 15 s	
Technologies	PERC, HJT, P-Type, TOPCON, Bifacial	



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