## **LED's MEASURE SOLAR CELLS**

# LED SOLAR SIMULATOR SINUS-230 LIGHT



The LED solar simulator SINUS-230 LIGHT is the ideal solar simulator and light soaker for early-stage R&D. Its very accurate simulation of the sun's spectrum enables reliable long-term irradiation at minimum operating costs due to the long lifetime of LEDs. LED's present the new benchmark!

#### HIGHLIGHTS



Multicolor LED-based light source for a perfect copy of the sun

Typical LED lifetime of 20,000 hrs and more

6 Meets class AAA criteria (IEC 60904-9 ed.2) for spectral match, non-uniformity and temporal stability

Wide range of exposure times from flashes up to continuous illumination



WAVEL

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CLASSIFICATION				
	SINUS-230 LIGHT		Class AAA requirements (IEC 60904-9 Ed. 2)	
Spectral match	Class A	0.75 - 1.25	0.75 - 1.25	
Nonuniformity of irradiance	Class A	< 2%	< 2%	
Long-term instability (LTI)	Class A	< 2%	< 2%	

Classification conditions: 100 ms irradiance time with 20 ms pre-measurement delay, 1 sun, AM1.5g, 160 x 160 mm<sup>2</sup> 110 mm working distance between light engine and test plane



PRODUCT FEATURES		
Spectrum	AM1.5g Optional: AM0 or any customer-defined spectrum possible with light engine including illumination by single colors upon request. Spectral range from 350 nm - 1,100 nm	
Intensity	0.2 to 1.2 suns	
Irradiance time	As required: From 10 ms up to 250 ms <b>Optional:</b> Continuous illumination, requires water-cooling	
Flash-to-flash time interval	From 1 s, depends on irradiance time and intensity	
Test area	Class A uniformity: 160 x 160 mm <sup>2</sup>	
Area of LED array	320 x 340 mm <sup>2</sup>	
I-V sweep trigger	Light engine can be triggered by SMU for I-V sweeps	

#### SCOPE OF DELIVERY

• Light engine (L x D x H) 437 mm x 376,1 mm x 157 mm, 12.8 kg

Power supply: 19" rack mount chassis, 2U
Laptop with software

All cables

• CE certificate

User manuals