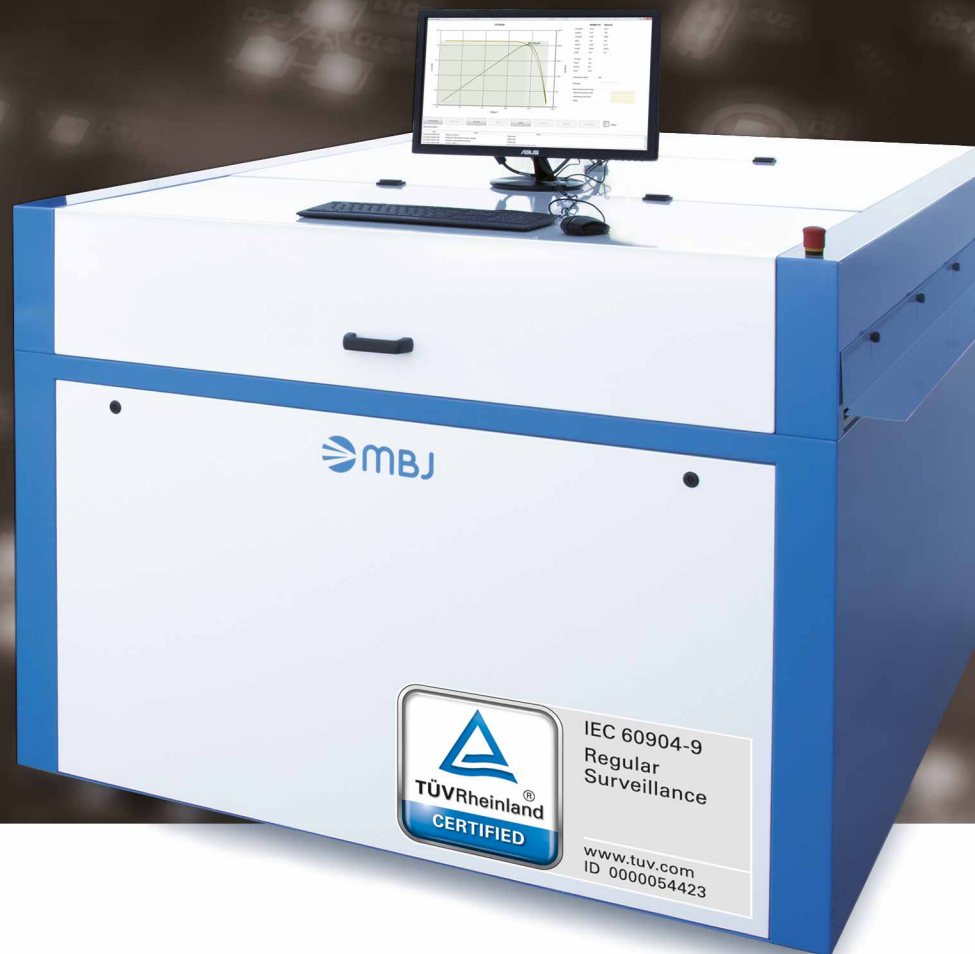


# MBJ LED sun simulator

Future-proof innovative LED technology

Innovative inspection solutions  
for the photovoltaic industry



## A+A+A+ LED Sun Simulator IEC 60904-9 TÜV certified

- Superior LED life time
- Pulse width up to 200ms
- Extended spectrum
- Made in Germany

The MBJ LED sun simulator is a new innovative TÜV certified LED triple A+ sun simulator in a very compact system design. The measurement is performed sunny side down which makes the integration into the production flow easier than ever. The newest ed 3 version with its extended spectrum and the enlarged illumination area is ready for new cell types and cell layouts.

# MBJ LED sun simulator

## Future-proof innovative LED technology

### Field of Application

The MBJ LED sun simulator is a new, innovative TÜV certified triple A+ LED sun simulator. The measurement is performed sunny side down, which makes the integration into the production line a lot easier than it used to be.



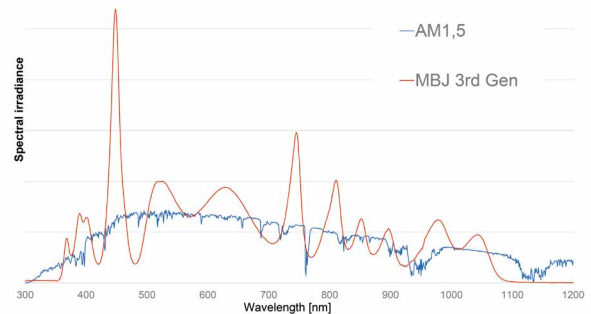
The powerful and easy to use SW

The LED technology addresses the major problems of the established XENON technology: much longer life time and a substantially better stability of the light source over time. All this results in better measurement results and significantly reduced operating costs over the systems life time. The long pulse together with an innovative step wise measurement is ready for the newest cell technologies.

The LED sun simulator is available as long or short edge leading version.



The MBJ LED sun simulator is available in two versions: As a cost efficient ed2 version with 6 types of LEDs and the new ed3 version with an extended spectrum (13 different LED types) and an enlarged area perfect for new cell types.



Optional available: Second LED unit for bi-facial measurement, the support unit for handling of glass-glass modules, the Hipot and grounding for framed modules.

Model	MBJ LED sun simulator	MBJ LED sun simulator 4.0
Cycle time	< 20 sec	< 20 sec
Max. module size	1050 x 2050 mm	1050 x 2250 mm
Light source	LED (IEC 60904-9 edition 2)	LED (IEC 60904-9 edition 2 and 3)
Total irradiance	200 - 1000 W/m <sup>2</sup>	200 - 1200 W/m <sup>2</sup>
Classification	A+A+A+	A+A+A+
Max. active area (A+)	1000 x 1940 mm	1020 x 2140 mm
Spectrum range	400nm -1000nm	350nm -1100nm (optional 1200nm)
Number of LED types	6	13 (optional 14)
Repeatability Pmax	< 0.1 %	< 0.1 %
Flash pulse duration	up to 200 ms at 1000 W/m <sup>2</sup>	up to 200 ms at 1000 W/m <sup>2</sup>
Life time of LED's	> 10 million flashes at 1000 W/m <sup>2</sup>	> 10 million flashes at 1000 W/m <sup>2</sup>