

MBJ Module Tester

Testing PV modules made easy:

The MBJ Module Tester combines power measurement and EL measurements in a compact test station. The integration of electrical insulation is optionally possible. The lack of a fully automatic solution makes the system simple, cost-effective and reliable. The module tester is used in small production plants or when testing used modules, for example during recycling.

- Newest LED technology
- Electroluminescence system integrated
- Suitable for almost all module types
- IEC 60904-9 Ed.3 certified
- Made in Germany



Sun Simulator	Standard	MAX
Technology	Full spectrum long pulse LED Flasher, expected LED lifetime more than 10 Million Flashes Class A+ IEC 60904-9 Ed.3	
Spectral coverage (SPC)	94 % +/-3 %	
Spectral deviation (SPD)	43 % +/-3 %	
Total irradiance	200 - 1000 W/m ²	
Non uniformity	< ± 1 % Class A+ IEC 60904-9 Ed.3	
Long term instability (LTI)	< ± 1 % Class A+ IEC 60904-9 Ed.3	
Repeatability Pmax	< +/- 0,2 % (absolute, flash to flash)	
Flash pulse duration	long pulse, max 200 ms at full irradiance	

Electroluminescence	Standard	MAX
Camera type	CMOS cameras	
Resolution	> 12 MPixel	> 20 MPixel
Image acquisition time	~5 s (for a full panel image)	
Power supply	Power supply up to 250 V, up to 12 A for module power supply. Voltage and current controlled by software	
Operation mode	Fully automatic image acquisition, manual judgment through operator	

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Go to product:



Recycling made easy

The recycling of old modules will become a major issue in the coming years. We have now developed a special inspection system for this purpose. Because not every module has to be scrapped and it is in the interests of sustainability to test and reuse them.

The MBJ Module Tester is an all-in-one solution that tests the most important features of a module. This makes it possible to decide quickly and cost-effectively whether a module can be reused or whether it needs to be disposed of properly.

The MBJ Module Tester is designed as a manual inline system for in-depth quality analysis of photovoltaic modules. It is also the perfect product for small series production lines, special module production lines or even for recycling lines.

Operation is simple: the modules are loaded from a roller table or similar transport system, pushed manually into the measuring position and electrically connected to the system manually.



Thanks to the manually adjustable measuring position, the MBJ Module Tester can be adapted to all standard module sizes.

Using a simple lever, the width of the test surface and therefore also the transport system can be adjusted manually with millimeter precision.

The MBJ Module Tester consists of a high-resolution electroluminescence system and an A+A+A+ LED sun simulator for power measurement.

The manual operation simplifies the system and leads to an enormous cost reduction in the product price. The system can test up to 120 modules per hour, with the user-friendly software assisting the operator in assessing the EL images and evaluating the data.

The LED technology guarantees a long service life of the light source, which leads to an enormous reduction in maintenance costs.

MBJ Module Tester	Standard	MAX
Max. module size	1060 x 2250 mm	1400 x 2700 mm
Max. active area (A+)	1040 x 2160 mm	1360 x 2640 mm
Available options	Diode test, Hipot test, Label printer	



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