

MBJ Module Tester

Recycling of PV modules made easy:

Recycling is important and necessary in order to use our world's resources responsibly.

The MBJ Module Tester measures the most important and necessary criteria of old modules for reuse.

To make recycling profitable, the MBJ Module Tester dispenses with fully automatic handling and concentrates on the most important thing: the remaining performance and safety of the old modules.

- Newest LED technology
- Electroluminescence system integrated
- 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 | |

MBJ Module Tester

Go to product:



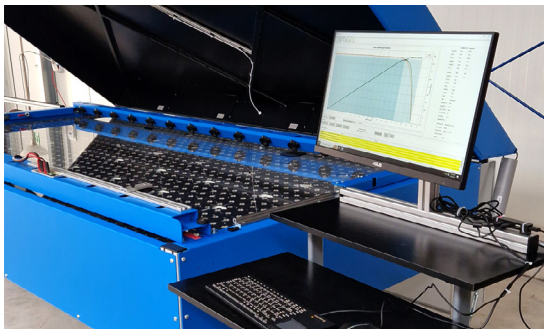
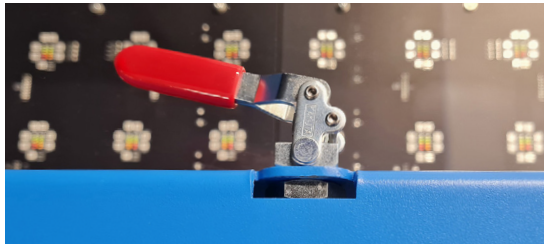
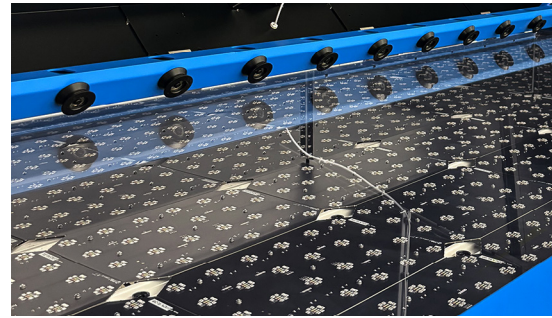
Recycling made easy

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 | |



MBJ Solutions GmbH
Jochim-Klindt-Straße 7
DE-22926 Ahrensburg

+49 4102 778 90 10
info@mbj-solutions.com
www.mbj-solutions.com

