

MBJ Mobile EL

Night and Daylight

High resolution on-site EL testing

The MBJ Mobile EL is a light weight easy to handle system for in-situ high resolution electroluminescence module testing.

With the Mobile EL hidden defects - like micro cracks and inactive areas - can be identified quickly and reliable directly on site. Disassembly of already installed modules for EL testing is not necessary.

- Field proven design
- Automatic defect detection
- For large panels
- Easy to handle, lightweight and portable
- Made in Germany



Technical specification	Mobile EL
Max. module sizes	1200 x 3000 mm (Can be covered by three captured images)
Module types	Framed and frameless glass-glass or glass-foil modules, mono-crystalline or multi-crystalline also PERC types and thin film
Cell sizes	Fully configurable
Camera type	CMOS camera, with 5 Megapixel
Resolution	~ 600 μm /pixel
Image acquisition time	~ 10 s for a full panel image (depending on module type and light conditions)
Power supply unit	Power supply up to 60 V, up to 25 A for module power supply. Voltage and current controlled by software.
Contacting of modules	Manual
Option: Daylight EL	EL imaging under daylight conditions. Additional hardware and software is needed for this option.

MBJ Mobile EL

Go to product:



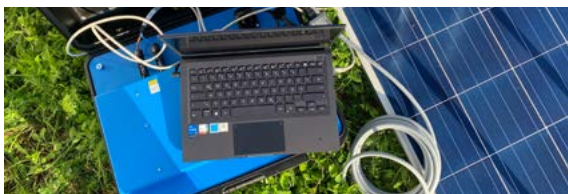
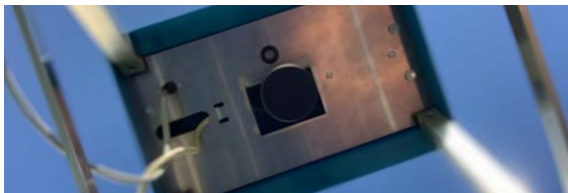
Field of application

The MBJ Mobile EL is designed for the acquisition of high quality electroluminescence data at the power plant without the need to unmount the installed panels.

The measurement head with the integrated electroluminescence camera head allows a simple and save operation. Due to fixed distance to the module under test always a good EL images is guaranteed.

The EL images provide up to 10 Mpixel resolution per panel allowing the detection of micro cracks, the main goal of any EL testing.

The intuitive software supports the operator decision based on the MBJ judgment criterias. The result is automatically compiled into a detailed report and stored as PDF document.



Analysis can be done on-site or later in the office. The office analysis software is included in the system package.

Image collection on-site has to be done after dark to avoid the influence of any level of sun irradiation. Single panels can also be tested indoors in a darkend room.

With the new Daylight EL option, electroluminescence images can also be taken during the day. Functionality is limited in direct sunlight, as image capture takes significantly longer and the image quality deteriorates. Nevertheless, the option makes working with the system easier, as it is no longer necessary to work at night.

The mobile inspection system consists of the measurement head with EL camera, the electronic box with module connection and power supply and of the laptop, which functions as control center and data storage.

The complete system comes in a single case. The equipment is compact and lightweight, easy to setup and intuitive to use.



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

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

