

# Mobile Lab 5.0

## On-site testing of solar modules

All you need in one small system



A+A+A+ certified Sun Simulator, Hi-Res EL and other testing options housed in one small mobile lab

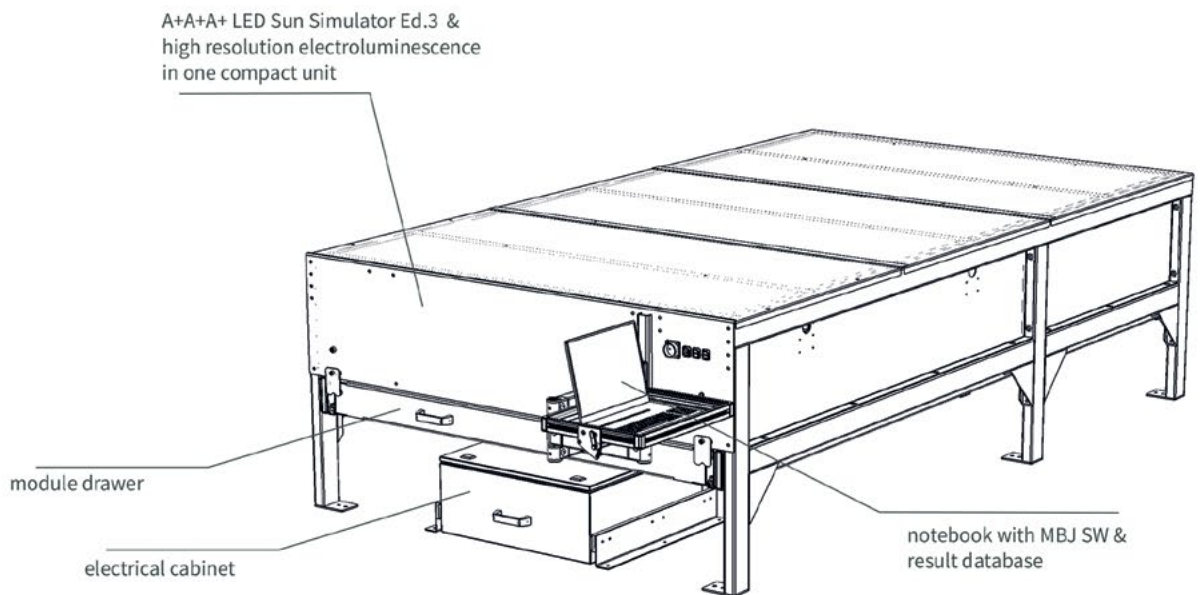
- ⇒ IEC 60904-9 Ed.3 certified
- ⇒ I/V curve measurement
- ⇒ High resolution EL
- ⇒ Made in Germany

The Mobile Lab provides most of the measurement and test methods needed for an objective analysis of solar modules in the field. With this powerful device insufficient module output as well as hidden defects like micro cracks, inactive areas, hotspots and other quality issues can be identified quickly and reliable on-site.



# Mobile Lab 5.0

## In-depth on-site quality testing of solar modules



### Field of Application

The new generation of the **MBJ Mobile Lab 5.0** combines a TÜV certified IEC 60904-9 Ed.3 A+A+A+ long-pulse LED sun simulator with a high resolution electroluminescence test into one very compact system. With the new innovative design, I/V-curve measurement and electroluminescence imaging happen in one position without the need to move module, camera or light unit. An automatic connection test and a diode test are also included.

The unit can be integrated into a small van, a trailer, a container or it can be used as stand-alone system. It is ideal for in-field use at installation sites.

Ease of operation: Solar modules are loaded into a module

drawer, are manually electrically connected and moved to the inspection position by closing the drawer.

A 17" notebook runs the MJB evaluation software, allowing the judgment of power measurement and EL image. All measurement data is saved automatically into a database, from which an automatically generated report compiles all result data into one pdf document for further analysis.

A very short testing time per panel allows high volume on-site throughput at the highest quality level.

Note that a van, trailer or container is not part of the system delivery scope.

| Mobile Lab 5.0    | Standard   | ECO            | MAX            |
|-------------------|--|----------------|----------------|
| Max. module size  | 1060 x 2250 mm   | 1240 x 2400 mm | 1400 x 2700 mm |
| LED sun simulator | Enhanced spectrum A+A+A+ sun simulator, 200-1200 W (IEC 60904-9 Ed.3)          |                |                |
| EL system         | NIR CMOS cameras   |                |                |
| EL resolution     | >20 MPixel   | > 24 MPixel    | > 30 MPixel    |
| Image acquisition | ~ 5 sec (for the full solar module)  |                |                |
| Module types      | c-Si, PERC and thin-film/ framed, unframed, glass-foile, glass-glass, bifacial |                |                |
| Included options  | Connection and bypass diode test   |                |                |