

Smart UV light

Easy and cost efficient Micro Crack screening

Innovative inspection solutions
for on-site testing



Micro Crack detection using UV fluorescence for installed panels

- Easy to use
- No powering of panels
- Visible by human eye
- Fastest throughput

Easy and efficient discovery of micro cracks in installed panel is now possible with the Smart UV light. Used by night micro cracks and other defects are visible by human eye without large preparation effort. The MBJ Smart UV light is the first ready to use UV fluorescence set on the market.

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Handheld Smart UV light



Compact equipment box

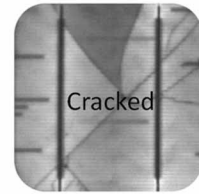
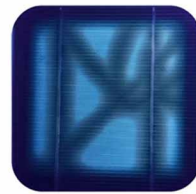
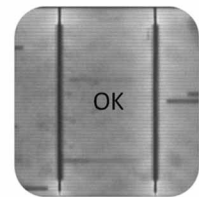
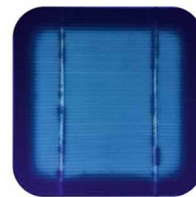
Field of Application

The Smart UV light is an easy to use tool for detecting micro cracks in installed solar panels.

At night time, the high power UV illumination activates on most panels a fluorescence effect showing a homogeneous glow with darker areas at the edges in a cell without micro cracks. When a cell has micro cracks dark lines will overlay these cracked areas in the cell, see the example images on the right.

With this technique micro cracks can easily be detected with the unaided human eye and can additionally be documented with a standard mobile phone camera. In the field a throughput of up to some hundred panels per hour is possible. The Smart UV light set provided contains everything needed in the field, including safety

glasses, a smart phone UV cut-off filter and AC/DC wide voltage range chargers for the battery.



Model	Smart UV light
UV light source	Two high power 4W UV-A Leds, EN 62471 risk group 3
Mode of operation	night time use, visual inspection, battery driven, IP 65
Battery details	4400 mAh Li-Ion, 7.4V, 33Wh (ok to take on planes), operation 4-5h,
Panel types	installed (> 6 month) crystalline panels with EVA and back sheet
Outdoor case	waterproof, IP 67, 42 x 32.5 x 18 cm, with content 3kg
Accessories in the set	2x UV 400 safety glasses, UV cut-off smart phone filter, 100-240V AC and 12V DC charger