

# SolarCell EL-lab

## Electroluminescence Cell Inspection

Innovative inspection solutions  
for the photovoltaic industry



Stand-alone high resolution inspection system  
for electroluminescence imaging

- Easy to use
- Cost effective
- Compact design
- Made in Germany

The SolarCell EL-lab is a stand-alone electroluminescence inspection system for solar cells. It is the ideal system to check the quality of solar cells in the laboratory and in the production area. The automated contacting unit and the easy to use software are making the system user friendly.

# SolarCell EL-lab

## Electroluminescence Cell Inspection



### Field of Application

The SolarCell EL-lab is a stand-alone electroluminescence imaging system. It is the perfect tool for laboratory and production environment to assure the quality of the solar cells. Electroluminescence imaging makes invisible defects clearly visible, such as micro cracks, finger interruptions and inactive areas. The system also supports reverse current measurement to identify short cuts in the solar cell that might cause hot spots in a solar module during operation. The unique design makes electroluminescence inspection for solar cells simple: open the drawer, place the solar cell inside the drawer and close the drawer. The system automatically contacts the solar cell to apply power to the cell and acquires a high resolution electroluminescence image.



The user friendly graphical user interface

Model	SolarCell EL-lab	SolarCell EL-lab HR
Resolution	170 $\mu\text{m}$ (1,4 MPixel)	100 $\mu\text{m}$ (4 MPixel)
Camera type	cooled NIR CCD camera	cooled NIR CMOS camera
Cell sizes	5" and 6" cells (other on request)	
Cell types	mono and multi crystalline cells with up to 5 busbars (other on request)	
Image aquisition time	1 sec	2 sec
Dimensions (W x Lx H)	360 x 515 x 675 mm	