

## Model L-P81W-H7CHD-R

### Overview



The LPI is used for online PL detection in photovoltaic intelligent manufacturing lines. The defect image is transmitted to the user's PC through the Gigabit network.

Users can use image recognition technology to judge and identify defects in imaging, and cooperate with automation to eliminate them.

Typical defect types include: hidden cracks, broken edge, black core, concentric circles, scratches, belt marks, and dirty.

The LPI can help users eliminate defective chips in the process to increase the production of A-grade chips, which is a non-contact non-destructive testing method. The detection process does not affect production speed, and can help users identify potential product defects in the process so that adjustments can be made on site in a timely manner, reducing potential waste of raw material costs in the future. The current production field of crystalline silicon batteries has gradually tended towards larger and thinner sizes and thicknesses. In this context, traditional contact testing is difficult to effectively control the fragmentation rate, and laser PL non-destructive testing will become an essential detection method and a standard product for removing defective products in photovoltaic processes.

### **Characteristics**

Non contact detection, suitable for different production line beats.

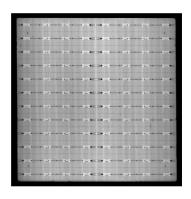
Adopting integrated structure design, solve the on-site debugging troubles.

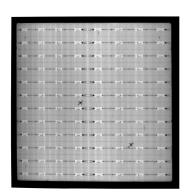
Laser PL imaging with higher image contrast.

Main Parameters	
Туре	✓ PERC  ✓ TOPCon  ✓ HJT
Process	<ul> <li>□ Raw silicon wafer</li> <li>□ Texturing</li> <li>☑ Front-PE</li> <li>☑ Post-PE</li> <li>☑ Post-EL</li> </ul>
Size	✓ 166mm ✓ 182mm ✓ 210mm ✓ 230mm
Object Distance	≤147mm
Resolution Ratio voltage	☐ 1K  ☐ 2K  ☑ 4K
Beat (Pcs/h)	□ 3600
Product Form	✓ Imaging Components

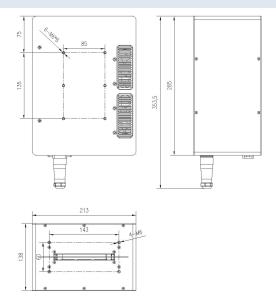
Other Parameters		
Parameter	Unit	Typical Value
Power	W	50
Linewidth	mm	2-3
Safety Level		Class 4
Input	AC	220V@300W
Ambient Temperature	°C	+10 ~ +35
Storage Temperature	°C	-20 ~ +60
Dimension	mm	213*285*138
Overall Weight	Kg	7

# **Application Display**





## Dimensions (mm)



### Caution

- 1. Please keep the laser emission port unobstructed and avoid eye exposure to the laser directly.
- 2. Please do not plug or unplug laser power plug with electricity to prevent laser breakdown.
- 3. Please contact the manufacturer promptly in case of any malfunction. Do not disassemble it to avoid damaging internal precision components.





