

# Model O-12CA-E84X-V1.1B

## Overview



OSI Module is a near-infrared laser light source, matching high-definition line scanning camera. It is mainly used to detect defects such as hidden crack and missing edges in the whole process.

While using,it is necessary to separate the laser source and the line scanning camera on the upper and lower sides of the measured object.With the performance of better direction of the laser,penetrate the silicon wafer and image it at the end of the camera.Laser has the advantages of longer wave-length, stronger penetration, high brightness, highuni-formity and sharper silicon edge imaging.

Besides hidden crack and broken edges, OSI Module can detect a variety of defects such as dirty, finger marks and so on. Users can identify, judge and remove defective products online through computer image recognition technology. The high-quality imaging of the OSI module, combined with advanced image processing algorithms, enables a very high defect detection rate, reducing the backend breakage rate, saving substantial costs for users, and effectively controlling the quality of supplier materials and real-time detection of process defects.

## Characteristics

Superior defect detection, coupled with advanced client algorithms, ensures a very high detection rate.

High uniformity and brightness  
Meet differentproduction lines

Hidden cracks and broken edges  
detected both More cost-effective.

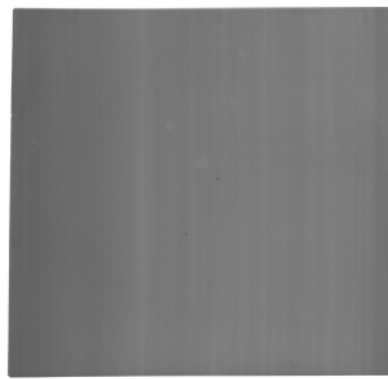
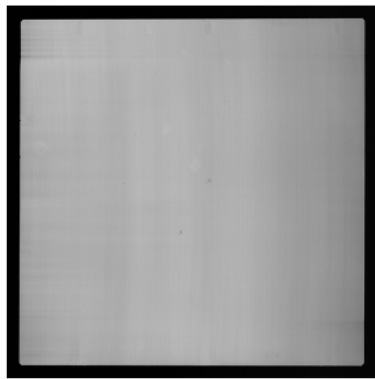
## Main Parameters

Type	<input checked="" type="checkbox"/> PERC	<input checked="" type="checkbox"/> TOPCon	<input checked="" type="checkbox"/> HJT
Process	<input type="checkbox"/> Raw silicon wafer <input checked="" type="checkbox"/> Screen Printing	<input checked="" type="checkbox"/> Texturing <input checked="" type="checkbox"/> Post-furnacing	<input checked="" type="checkbox"/> Front-PE <input checked="" type="checkbox"/> Post-EL <input checked="" type="checkbox"/> Post-PE
Size	<input checked="" type="checkbox"/> 166mm	<input checked="" type="checkbox"/> 182mm	<input checked="" type="checkbox"/> 210mm <input checked="" type="checkbox"/> 230mm
External Trigger voltage	<input checked="" type="checkbox"/> 24V	<input type="checkbox"/> 12V	<input type="checkbox"/> Not
Product Form	<input type="checkbox"/> Convex	<input checked="" type="checkbox"/> L	<input type="checkbox"/> Z <input type="checkbox"/> T <input type="checkbox"/> others
Beat (pcs/h)	<input checked="" type="checkbox"/> ≥3600	<input type="checkbox"/> <3600	
Color	<input type="checkbox"/> Black	<input checked="" type="checkbox"/> White	

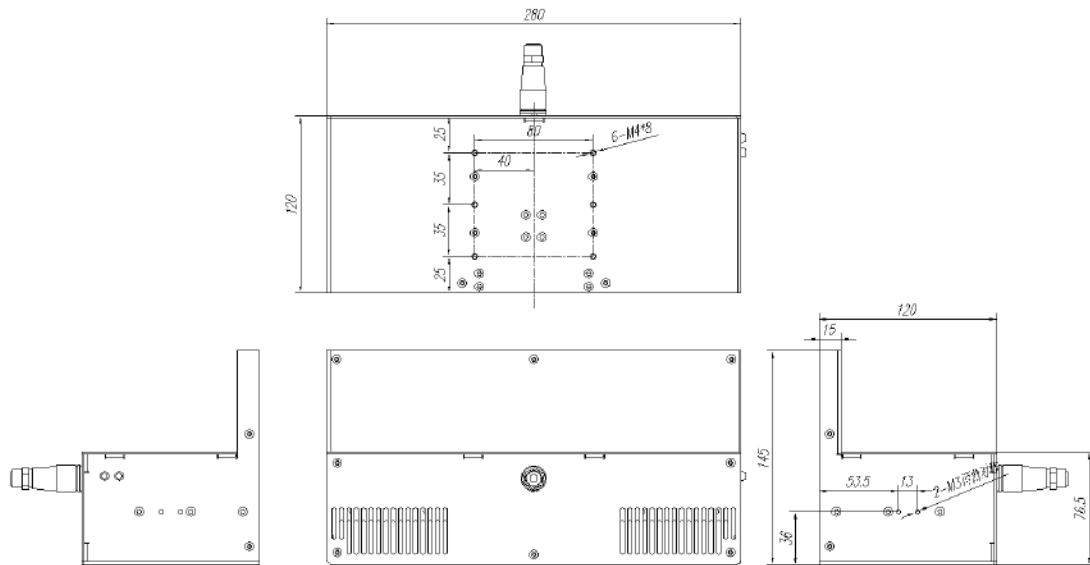
## Other Parameters

Parameter	Unit	Typical Value
Luminescence length	mm	260
Safety level		Class 1
Input	V	24
Power	W	150
Ambient temperature	°C	+10 ~ +35
Storage temperature	°C	-20 ~ +60
Dimension	mm	280*120*145

## 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.

