

SI-V8 Series

Functions and features

- Developed for microelectronic screen printing, applying for automatic defect detection.
- High-strength body structure and ultra-high-precision linear rails, stable scanning ability of repeatable positioning accuracy <math><4\mu\text{m}</math>.
- High-resolution 2.4 μm bits industrial camera and can be customized upon request.
- Max. speed of 100sec/0.04 m²/2.36 μm (depending on resolution) fast image processing system.
- AI smart learning function, capable to gradually reduces missed / false detections according to actual application standards. Missing detection rate of defects $\geq 5\mu\text{m}$ or above 10 μm : $\leq 1\%$
(Unknown defects will not be evaluated)
Misjudgment rate of false defect (point): Probability of total false defect point above 100 in each detection is $\leq 20\%$
- Three inspection modes: CAM data comparison + AI deep learning + blind inspection algorithm.
- Integrated with inspection and maintenance / Laser positioning / Automatic focus and Magnificat defect images / Inspection and repair can be proceed at the same time / Capable to on-line connecting with multiple silk-screen repairing machines and with data interconnection. Efficient working flow via separating inspection and repair capability.
- System upgrade & real-time service response can be proceeded remotely.



Ideal solution of Silk-screen Quality
Efficiency improving

Model	W-SI-V8
Screen Dimension	185*255mm MAX. 600*600mm Customize fixture carrier platform according to actual silk-screen dimension.
Effective Detection Dimension	MAX : 400*400mm
Data Format	Gerber274X
Industrial Grade Camera	2.4 μm resolution, B/W & Color 20-million-pixel high-resolution B/W camera, 1x telecentric low distortion lens 2-million-pixel high-resolution video camera, Auto focus lens
Auto Focus	Standard configuration
Laser Positioning	Standard configuration (For maintenance)
Auxiliary Light Source for Detection	High brightness white light vertical light source
Barcode Scanner	Standard configuration: Pre-load silk-screen serial number, support barcode & QR code.
Operation System	Windows 10 i5-10400F / 8G / 500G / Nvidia 8GB Graphic card 27" high-resolution display
Machine Dimension	1380mm*1300mm*1400mm
Net Weight	350Kg
Power	220VAC, 50 / 60HZ, 2.5KW

Example of Defect

NO	1	2	3	4	5	6
Type of Defect	Broken Screen	Dirt	Poor Developing	Gum Peel-off	Dust	Abnormal Graphic
Reference Image.						

