

S1-500D AOI SYSTEM

SPECIFICATION SHEET

Equipment Parameters	
Number of tracks	Dual track
Track Height	900±20mm (Distance from the track to the ground)
Motion System	X/Y/Z, AC Servo Motor
Motion System Precision	± 0.01mm
Track Direction	Left to Right or Right to Left (customizable as needed); Dual-track configuration
Power Supply	AC220V, 50/60Hz International Power Plug
Power Consumption	8.8KW
Air Pressure	0.4-0.6Mpa
Dimension	L1290*W1710*H1990 (excluding tri-color light and other accessories)

Optical Imaging System	
Camera	18MP High-Speed Monochrome Camera + Telecentric Lens
FOV	60mm x 60mm
Resolution	14μm
Inspection Speed (Range)	> 10cm²/s
Max 3D Height Measurement	25mm
3D Technology	Four-direction Structured Light Projection

Inspection Parameters	
Camera Light Source	
Illuminating Light Source	RGBW color light source
Inspection Defect Items	
Component Defects	Missing/wrong/damaged/lifted component, tombstone, billboard, polarity, misalignment, turn over, foreign objects, float, silk screen;
Solder Defects	Solder height, solder volume, excessive solder, insufficient solder, solder bridge, lifted lead, gold finger defects, surface scratch/solder adhesion;
Inspection Capability	
Minimum Component Size	0603 (mm) / 0201 (inch)
Precision	±6μm (using calibration tools)
PCB Dimensions	
Thickness	0.6–5mm
Maximum Size	500x330mm (dual track)
Minimum Size	50x50mm
Clear distance	Top: 50mm, Bottom: 40mm

