MAKER-RAY

Inline PCBA Double Sided AOI Top 2D Bottom 3D

AIS 550-HW

Configuration

Category	Items	Inline PCBA Double Side (Top 2D, Bottom 3D) AOI AIS550-HW	
PCBA	Dimension	50*50mm-510*460mm(Large board mode support 730*460mm)	
	Thickness	0.5mm-8mm	
	Height Clearance	900mm	
	Max weight	Roller tack [Payload≤20KG]	
	Max Component Height	Top: 75mm. Bottom: 30mm	
	Edge Clearance	3mm	
Vision Module	Camera	Top Camera	Bottom Camera
		12MP Color high speed camera	12MP High frame rate monochrome industrial camera
	Light Source	WRGBW	RGBW + 4 Projectors
	FOV	15.5um: 65mm*43mm 10um: 40*30mm(Option)	15um:60*45mm 10um:40*30mm(Option)
	Resolution	15.5um,10um(Option)	15um, 10um(Option)
	Speed	0.26sec/FOV	0.58sec/FOV
Inspection	Camera	Components: Wrong, Missing, Polarity(Reversed), XY Offset, Angle Offset, Damaged, Skewed, Etc	
	Solder Inspection	Excessive, Insufficient, Bridging, No Pin, Cold Solder, Solder Hole, and Solder Ball, Pin length, etc.	
	Main Algorithm	AI Algorithm Mainly: AI Solder Algorithm, AI Solder Hole Algorithm, AI Bridging Algorithm and AI No Pin Algorithm, AI Missing Algorithm, etc.	
	Multi-Scene Inspection	Support Auto Change Program, mixed board, mixed material mode and multi-panel mode	
Programming	Programming Method	AI one-click programming: Auto-drawing detection box for trained parts. Intelligently analyze NG to configure the required algorithm and related parameters. Non-required manual framing or adjusting color and parameters.	
	In-line on fly programming and finetuning	Feature allow users perform programming , components changes or parameters updates without stop or distract the active production line.	
	2D Offline Programming PC	Supports remote programming or adjustment to update to AOI in real time. Do not need to cross production lines or floors to operate AOI one by one. Not restricted by time and space with higher work efficiency.(Option)	
Other Features	Barcode Identification	1D / 2D barcode & QR Code identification (5*5mm above)	
	Statistical Data Analysis	Software solution to display AOI inspection record, analysis, graph and chart ploting. Extract data summary in excel or .csv file format.	
Hardware	Industrial Computer	CPU: intel i9 Graphics: Nvidia GTX3060 Memory: 128G DDR4 Storage: 1TG SSD + 10T HDD Netword: 1000M network	
	Display	23.8 Inch FHD	
	Operating System	Ubuntu 18.04 LTS 64bit	
	Communication	Standard SMEMA interface	
	Width Adjustment	Manual/automatic.	
	Motion Structure	High precision screw + servo motor	
	Dimension and Weight	(L*H*W) 1204*1642*1535mm (900mm conveyor height. Tower light excluded), 1000Kg	
	Power Supply and Power	AC 220V, Rate power 730W	
	Air	0.4-0.6Mpa	
	Environmental Requirements	Temperature: 10~45℃. Humidity: 30~85%RH	

*Product specifications will be updated iteratively, the above parameters are for reference only