

# Online 2D SMT AOI

## AIS40X Series

- ✓ One-click programming for higher efficiency
- ✓ Low false positive rate by AI method
- ✓ Multi-apply to benefit different assessment



### CORE FUNCTIONS

#### AI intelligent programming

Automatically select solder joints and set parameters without importing CAD, Gerber and other files

#### Online/offline programming

Online programming to save line down time

#### Support Mixed model and panel inspection

Auto recognize mixed model and panel inspection by AI positioning algorithm

#### AI model training

Model self-training for special components, reduce false positive rate

#### Multi-function

Multi-purpose, inspect component defects of SMD, THT, solder joint, etc

#### Barcode reading

Auto reading of codes (such as code 128, QR codes, Data matrix), original board data is traceable

#### Centralized management by remote control

Centralized management of multiple production lines, remote control to save maintenance costs

#### SPC data analysis

Real-time data recording and analysis, providing evidence for process improvement, and real-time trace data

## Detectable defects



## Specifications

Category	Item	AIS401		AIS 400-D	
PCBA	Size	50*50mm~510*460mm （Large board mode: Left to right: max730*460mm Right to left: max640*460mm)		50*50mm~510*610mm （single rail operation) 50*50mm~510*330mm （Dual rail operation)	
	Thickness	0.5mm-6mm			
	Height of elements	Top:25mm, Bottom: 80mm			
	Processing edge	3mm			
Optical specification	Camera	12MP, color			
	Light source	RGB + W four color integral			
	FOV	15um@45*45mm, 10um@40*30mm		15um@60*45mm	
	Resolution	15um （Standard）, 10um		15um	
Inspection-related	Components	Absent, Reversed, Mis-alignment, Broken, Extra,Foreign matter,Stained, etc.			
	Solder	Insufficient solder,excessive solder,bridging,pseudo solder etc.			
	Other function	Bar code Recognition / QR code Recognition/ OCR			
	Mixing boards inspection	Support calling program automatically			
	Algorithm	CNN,Color contrast,Outline recognition,Offset inspection,Template matching,Character comparison,OCR,etc.			
	Speed	0.23sec/FOV			
Software	Operating system	Ubuntu 18.04 LTS 64bit			
	Function	Remote control, remote assistance, CAD file import and user-defined model training			
	Communication method	Standard SMEMA interface			
	Data output	Autogenerated statistic analysis SPC			
	Special function	Automatic search of elements and quick programming			
Hardware	PC	CPU: intel i5 Display card: NVIDIA GTX1050Ti Memory: 32G DDR, 240G SSD+2T Mechanical Hard Disk Network: 1000M Wired Network Card			
	Display	23.8 inch FHD display			
	Motion mechanism	High precision lead screw + servo motor			
	Rail width control	Manual/auto			
Appearance /electric	Dimention and weight	(L*H*W) 1015*1539*1086mm, net weight:750Kg		(L*H*W) 1015*1539*1370mm, net weight:790Kg	
	Power supply and power	AC 220V, rated power 380W			
	Air source	0.4-0.6Mpa			
	Work environment	Temperature: 10~45℃, Humidity: 30~85%RH			

\*Specifications are subject to change without notice.