





# **ON-LINE 3D AOI**



**High precision** 



High speed



**High performance** 

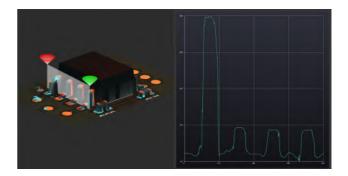
### **PRODUCT FEATURES**

- High precision control platform
- The motion platform adopts the double driver system, high-speed, stable, no vibration, no noise
- High speed industry camera
- Multi projective structure grating system
- The N step phase shifting algorithm based on the white light moire fringe technique, providing high inspect accuracy; There are multiple grating for option to deal with light and shadow

## **FUNCTION MODULE**

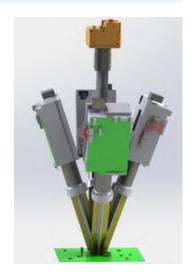
### Integrated excellent detection algorithm, can inspect the chip floating and the IC lifted

The unique 3D point cloud reconstruction technology can greatly improve the detection accuracy and detection ability, can effectively cover the 2D detection blind area, 2D is difficult to detect the IC foot, the buoyancy of parts can reach 100% detection rate.



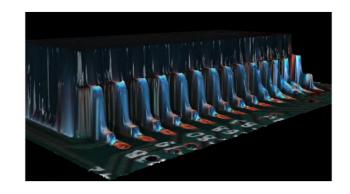
#### Comprehensive and sophisticated visual recognition system

Under the deep coordination of 12MP high-definition COAXPRESS ultrahigh speed camera and several sets of 1080P digital projection units, through multi-stage RGBW four-color LED tower light source, 360° non-dead angle digital projection and efficient image acquisition and real effect can be achieved.



#### True color 3D image

Phase measuring profilometry (PMP) based on the sinusoidal motion projection by structure grating, the multiple images by discrete phase shift, to calculate the phase distribution by multi-phase, the triangulation and so on to get the high-precision outline and volume of the object, to achieve the display of true-color 3D stereoscopic images.



# TECHNICAL PARAMETER

Vision System	S910	S920	D910	D920
Camera	High-Speed CCD 12MP			
Lens	Telecentric Lens			
Projection system	4 directional projection gratings			
Light	Ring RGBW LED Light			
Resolution	15µm (12µm,10µm,8µm for option)			
FOV	60*45mm (15μm); 40*30mm(10μm)			
Performance				
3D Height measurement range	-2~20mm			
Height resolution	0.4µm			
Height Accuracy on a Certificated Target	±3μm			
GR&R	<1%@3sigma			
Shift Position Accuracy	10μm	5μm	10μm	5μm
Inspection Type	Missing, shift, skewed, tombstone, billboard, overturned, reversed polarity, wrong, damaged, Overflow, insufficient, short, dimension.			
PCB Warpage	±5mm (2%)			
Machine parameters				
Board size range	50×50 ~ 510×460mm		Dual-track: 50*50 ~ 510*300mm Single-track: 50*50 ~ 510*560mm	
Top side/Bot side clearance	50 / 50 mm			
Conveyor Height	900±20mm			
Dimension (W×D×H) not contain Tower Light	1200*1280*1656mm	1382*1389*1600mm	1200*1520*1656mm	1300*1632*1600m
Driver	Servo Motor	Linear Motor	Servo Motor	Linear Motor
Weight	~700kg	~900kg	~950kg	~1150kg
Power supply	220V±10%, 50/60Hz, 1.6KW 220V±10%, 50/60Hz, 2.5KW		/60Hz, 2.5KW	
Air Supply	0.5mpa, 40cm³/min			
Operation System	Windows 10 Pro			
PC parameters	CPU: Intel I9, RAM: 128G, HDD: 1TB SSD + 2TB HDD, GPU: RTX 1650 Intel I9 CPU, Memory: 128G, Hard disk: 1TB SSD + 2TB HDD, GPU: RTX 1650			
Display	24-inch LED			
Result	2D/3D true color			