

# ALD515 i3D AOI

## Leading the Way in Low Volume Production

**SMD, Wave soldering & Solder paste inspection  
Best User Choice for Low-Volume Production**

### ALD515 i3D off-line

The ALD515 i3D was built as an entry level machine for customers requiring a high-quality AOI with low price. It uses the latest in i3D advanced optics and the SP2 SW – ALeader's proven as a fast and easy-to-program solution. While entry-level, the ALD515 i3D can be upgraded to the latest SW generation.

### Unique Technologies Implemented in These Models

- i3D Technology
- i3D Height Analyzing & coplanarity check (optional)
- i3D Shape Analysis
- Debug-Free Technology (Optional)  
(Including flexible packages)
- Escape-Free Technology (Optional)
- False Calls Control Technology (Optional)
- Over come all inspection challenge
- Small Chip: Coplanarity, offset, cold soldering, no solder, missing, tombstone and more.
- Production Process Control SW: prevent defects in real time, improve and control your production.

i3D detects small chip coplanarity, cold soldering, missing, tombstones and more errors.



## ALD515 i3D

FOV/Test Speed		FOV (20 um) : 32.56x24.72 ; Test speed < 260 s/FOV FOV (15 um) : 22.42x18.52; Test speed < 240 ms/FOV	
Inspectable PCB's	Size	50x50mm(Min) to ~ 430x330mm(Max)	
	Thickness	0.3 to 5 mm	
	Clamping Edge	TOP ~ 3.5 mm Bottom ~ 3.5 mm	
	PCB Height Clearance	Top Side: 30 mm Bottom Side: 60 mm	
Operating System		Windows 7	
Display		22-Inch TFT LCD	
X/Y Driver		Screw and AC servo driver with an accuracy <20µm; camera moves along X axis.	
Power		AC230V 50/60 Hz 0.8KVA *AC 110 V model available on request	
Compressed Air		Compressed air is not used by this model.	
Weight		200 Kg	
Dimensions		1140x930x1309mm (LxWxH)	
Humidity		10~35°C 35~80°C RH (No dew)	
Certificate		CE Certificate	

## ALD515 i3D General Model Features

i3D Optical Model	i3D Technology	The 3 CCD intellectual cameras determine the shape out of the 3D image. Comprehensive coverage 0 to 360 degrees around as well as 90 degrees up and down.	
	i3D Height Analysis	Converts the height of the object to image length and position. Enables the detection of lifted leads and slightly tombstoned cold soldering on small chips.	
	i3d Shadow-Free Design	A telecentric lens and innovative design prevent shadowing.	
Certificate		CE Certificate	
Applications		Post reflow Pre reflow, wave soldering & solder paste.	
Inspection Items		<p>Detects missing, misaligned, billboard, coplanarity, overturn, wrong part, polarity, OCV, damaged, reversed, leveling, and tombstones.</p> <p>Solder defects covered: overflow, insufficient solder, unsoldered, short (1D &amp; 2D), stain, cold soldering and wetting problems, lifted leads, solder balls, holes, pin direction, missing pins and J, L,U-Leade.</p> <p>Detects</p>	
Barcode System		Camera can read and transfer the barcode automatically (1D or 2D). Features a multi-mark function check including Bad Mark.	
Remote Control		Remote control enabled through TCP/IP; remotely check results, start and stop the machine, or modify the program at any time.	
Sever Mode		Control several AOI through the central server (optional).	
Application Features	Shadow	Shadow-free technology.	
	Warpage	<5 mm Warpage-free technology.	
	OCV \ OCR	Standard on each machine.	
	Double Side Check	Identify and change sides automatically.	
	LED	LED polarity and wire bonding check.	