

Automated Optical Inspection

5K/7K series AOI / AOM Systems

New product range providing large board capability, inspection quality and throughput

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01005
APPROVED
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- For post print, pre reflow, mixed mode or post reflow applications.
- 100% inspection: presence, absence, polarity and placement accuracy as well as OCV and solder joints with Profiler® tool.
- Jedec component library powered with Vectoral Imaging technology inspection tools.
- Real-time Statistical Process Control (SPC) capability.
- Automatic conveyor width adjustment for boards up to 21" x 21" for 5K and up to 21" x 24" for 7K.
- Cycle time: from 170 000 to 400 000 components per hour.
- Powered by i-LITE (Programmable Illumination System).

VI TECHNOLOGY®

5K/7K Series - AOI / AOM Systems



SPECIFICATIONS

Type	5K	7K	7K Dual Lane
Mechanical system (dimensions in mm [inches])			
Maximum board dimensions	533.4 [21] x 533.4 [21]	533.4 [21] x 610 [24]	2 x 533.4 [21] x 287 [11.29]
Board thickness (minimum to maximum)	0.5 to 5 mm [0.019 to 0.19]		
Maximum board weight	3 kg [6.6 lb]		
Maximum inspectable board area	533.4 [21] x 533.4 [21]	533.4 [21] x 610 [24]	2 x 533.4 [21] x 287 [11.29]
Minimum inspectable board area	50 [1.96] x 50 [1.96]		
Clearance under camera	34 [1.33]		
Clearance under board	60 [2.36] (55 [2.16] at board support pins location)		
Clamping system edge	3 [0.12]		
Board positioning	Board and panel fiducials		
XY table	Linear motors and coders		
Frame type	Pre stressed frame		
Camera resolution			
Plus	1 620 x 1 220		
Perform	2 352 x 1 728		
Premium	2 352 x 1 728		
Pixel size (sub pixel technology)			
Plus	8 - 12 µm		
Perform	8 µm		
Premium	8 µm		
Camera field size			
Plus	42.1 [1.65] x 31.7 [1.24]		
Perform	61.1 [2.40] x 44.9 [1.76]		
Premium	61.1 [2.40] x 44.9 [1.76]		
Lighting system			
Lighting colors	i-LITE (red, green, blue)		
Lighting types	Axial and peripheral		
Average inspection speed			
Inspection time per component	4 - 20 ms		
Average inspection speed for solder paste (contacts per mn)			
Plus	55 000		
Perform	58 000		
Premium	75 000		
Average production cycle time (components per hour)			
Plus	170 000		
Perform	250 000		
Premium	400 000		
Type of components inspected	01005 up to exotic		
Software			
Operating system	WINDOWS XP		
Vision integrated software suite	Standard		
Off-line programming software	Standard		
Off-line repair software	Optional		
Standard Library based on Jedec packages	Standard		
Communication			
Upstream / downstream	SMEMA 2		
Network	TCP/IP, RJ45 plug		
Facilities			
Electrical supply	115 / 230 V, 50 / 60 Hz, 6 / 3 A		
Machine dimensions W x D x H	1110 [43.70] x 1351 [53.19] x 1892 [74.48]		
Weight	900 kg		
Transport height	950 +/- 10 [37.4 +/- 0.4] (option 850 +/- 10 [33.5 +/- 0.4])		

5K/7K
Automated
Optical
Inspection

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DIMENSIONS

