

# inspector

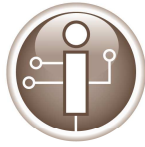


## HDL

## Automatic Optical Inspection systems

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| <ul style="list-style-type: none"> <li>√ Automatic Optical Inspection of PCB assemblies .....</li> <li>√ Inspects: .....           <ul style="list-style-type: none"> <li>- Components: SMT &amp; THT (missing, type, polarity, offset, text, colours etc)</li> <li>- Solder Paste and CIP (Components in Paste; pre-reflow)</li> <li>- Soldering: Post Reflow, Post Wave, Selective, Manual</li> </ul> </li> <li>√ Flexible classification and reporting scenarios .....</li> <li>√ In-Line and Desktop versions in 2 different sizes .....</li> <li>√ Multi-colour 3 angle lighting with Line Source Coaxial Lighting and Meniscus Profiler</li> <li>√ Low Noise Large CCD High Speed 24 bit Colour Camera</li> <li>√ Synthetic Imaging and Spectral Analysis.....</li> <li>√ Programmable from library or Golden Components ....</li> <li>√ Prototype mode for 1st off inspection .....</li> <li>√ Overhead Gantry construction.....</li> <li>√ Desktop versions with Manual or Automatic operated PCB loader.....</li> </ul> | <ul style="list-style-type: none"> <li><i>test your PCB's optically and replace manual inspection</i></li> <li><i>use inspection in all stages of the production process</i></li> <li><i>integrate AOI efficiently in your existing operations and factory lay-out</i></li> <li><i>choose the best hardware configuration for your processes</i></li> <li><i>reliable solder joint analysis</i></li> <li><i>find defects easier including printing defects on Gold or Cu plated PCB's</i></li> <li><i>powerful algorithms to achieve an optimal balance between defect detection and false reject levels in shortest time</i></li> <li><i>be flexible; from manual till full library programming depending on your product</i></li> <li><i>program in minutes to verify your production line is set-up correctly before starting full production</i></li> <li><i>moving camera with stationary PCB during inspection, suits pre-reflow applications</i></li> <li><i>easy PCB drawer-loader with automatic clamping for comfortable handling of PCB's. Drawer can be optionally motorised</i></li> </ul> |
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because inspection matters



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Desktop Series Specifications	iSpector HDL 350	iSpector HDL 650
Maximum PCB Size	350x250mm (13.8" x 9.8")	650x550mm (25.6" x 21.6")
<b>Characteristics</b>		
Product type	Automatic Optical Inspector	
In-line/Off-line	Off-Line	
Camera movement	X + Y Direction	
PCB movement	Stationary	
PCB fixation	Manual Drawer with Auto Clamping. Options: Motorised Drawer, Transverse loader	
Parts inspection	Presence, Polarity, Offset, Correctness, Soldering	
Printing/paste inspection	Offset, Smearing, Bridges, Uniformity	
Distinction principle	Synthetic Imaging, Spectral Analysis, Greyscale limits	
Distinction parameters	Brightness, Hue, Saturation via Filters	
Camera type	UXGA CCD digital with CameraLink	
Camera Field Of View/Resolution	32x24mm/20µm, option 16x12mm/10µ	
Lens	High Resolution Telecentric	
Lighting system	Omnidirectional Triple LED rings: Side, Main, Line Sourced DOAL Dif-fused On Axis Lighting (Coaxial))	
<b>Specifications</b>		
Minimum inspection component size	01005" (0.4x0.2mm)(10µm resolution)	
Positioning accuracy	Pixel related Feedback Loop	
Component clearance (top)	+50mm (2.0")	
Component clearance (bottom)	-70mm (-2.8")	-70mm (-2.8")
Maximum PCB Size	350x250mm (13.8" x 9.8")	650x550mm (25.6" x 21.6")
Movement speed	720mm/s	
Inspection capacity typical	1500cps/min	
Mains	100-240 Vac / 150W	
<b>Interfacing</b>		
Control PC type	Apple MacPro Intel DualCore with Mac OSX (not included)	
Control interface	USB	
Data interface	CameraLink	
<b>General</b>		
Operating temperature	15-30 degr C	
Operating humidity	15-80 % RH	
External size	W707 x D712 x H492 (27.8" x 28.0" x 19.4")	W940 x D1015 x H500 (37.0" x 34.0" x 19.7")
Weight	65kg (143lbs)	110kg (243lbs)

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