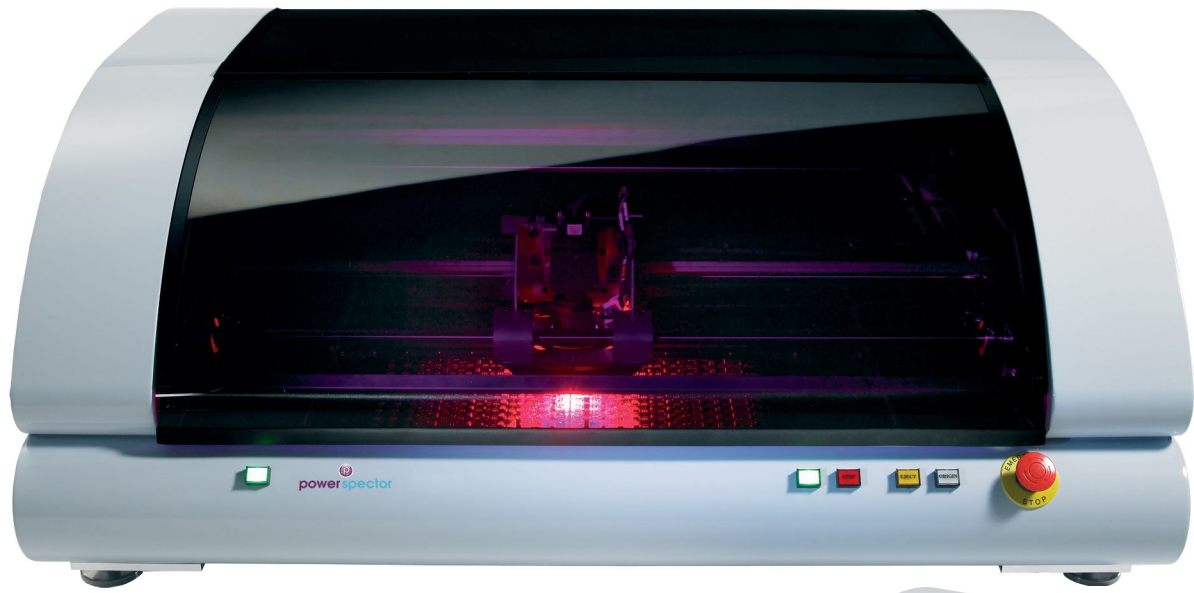




# powerSpector



because inspection matters

## Automatic Optical Inspection systems

- √ Automatic Optical Inspection of PCB assemblies..... *test your PCB's optically and replace manual inspection*
- √ Inspects:..... *use inspection in all stages of the production process*
  - Components: SMT & THT (missing, type, polarity, offset, text, colours etc)
  - Solder Paste and CIP (Components in Paste; pre-reflow)
  - Soldering: Post Reflow, Post Wave, Selective, Manual
- √ Flexible classification and reporting scenarios..... *integrate AOI efficiently in your existing operations and factory lay-out*
- √ In-Line and Desktop versions in different sizes ..... *choose the best hardware configuration for your processes*
- √ Multi-angle 3 colour lighting with Line Source Coaxial Lighting and Meniscus Profiler ..... *reliable solder joint analysis*
- √ Full colour camera and colour algorithms for 24bit defect detection ..... *find defects easier including printing defects on Gold or Cu plated PCB's*
- √ Synthetic Imaging and Spectral Analysis ..... *powerful algorithms to achieve an optimal balance between defect detection and false reject levels in shortest time*
- √ Custom built optics and image capturing devices..... *industry leading optics and picture quality sets the base for reliable inspection and flexibility*
- √ Programmable from library or Golden Components ..... *be flexible; from manual till full library programming depending on your product*
- √ Prototype mode for 1st off inspection..... *program in minutes to verify your production line is set-up correctly before starting full production*
- √ Different resolution options ..... *change your magnification depending on your project*



# power spectator

because inspection matters

Desktop Series Specifications	Powerspector 350	Powerspector 460	Powerspector 650
Maximum PCB Size	350x250mm (13.8" x 9.8")	460x360mm (18.1" x 14.2")	650x550mm (25.6" x 21.6")
<b>Characteristics</b>			
Product type	Automatic Optical Inspector		
In-line/Off line	Off-Line		
Camera movement	X Direction	X + Y Direction	X + Y Direction
PCB movement	Y Direction	Stationary	Stationary
PCB fixation	Ball Clamper	Pin Clamper	Pin Clamper
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 Camera Link		
Camera Field Of View/Resolution	40x30mm @ 25um or 32x24mm @ 20um		
Lens	Telecentric lens with built in prism for DOAL Lighting		
Lighting system	Omnidirectional Triple LED rings: Side, Main, Line Sourced DOAL (Diffused On Axis Lighting (Coaxial))		
<b>Specifications</b>			
Minimum inspection component size	01005" (0.4x0.2mm) (20um resolution)		
Positioning accuracy	Pixel related feedback loop		
Component clearance (top)	+40mm (1.57")		
Component clearance (bottom)	-60mm (option -120mm) (2.46"; option 4.7")	-100mm (-3.9")	-100mm (-3.9")
Maximum PCB Size	350x250mm (13.8" x 9.8")	460x360mm (18.1" x 14.2")	650x550mm (25.6" x 21.6")
Movement speed	600mm/s		
Inspection capacity	1700cps/min	1500cps/min	1500cps/min
Mains	100-240 Vac / 300W		
<b>Interfacing</b>			
Control PC type	Apple MacPro Intel Xeon with Mac OSX (not included)		
Control interface	USB		
Data interface	Camera Link		
<b>General</b>			
Operating temperature	15-30 degr C		
Operating humidity	15-80 % RH		
External size	W765 x D760 x H398 (30.1" x 29.9" x 15.7")	W946 x D876 x H458 (37.2" x 34.5" x 18.0")	W1190 x D1016 x H476 (46.9" x 40.0" x 18.7")
Weight	51kg (112 lbs)	89kg (196 lbs)	105kg (231lbs)

Marantz reserves the right to change the design and specifications without notice. © D&M Europe BV, November 2008

Represented/Distributed by:

**marantz**

**Business electronics**®

Marantz Business Electronics Europe, a division of D&M Europe BV  
 PO Box 8744  
 5605 LS Eindhoven, Netherlands  
 T +31 40 2507890  
 F +31 40 2507840  
[22x@marantzeurope.com](mailto:22x@marantzeurope.com) [www.marantz.com](http://www.marantz.com)