

# SE600™ 3D SPI

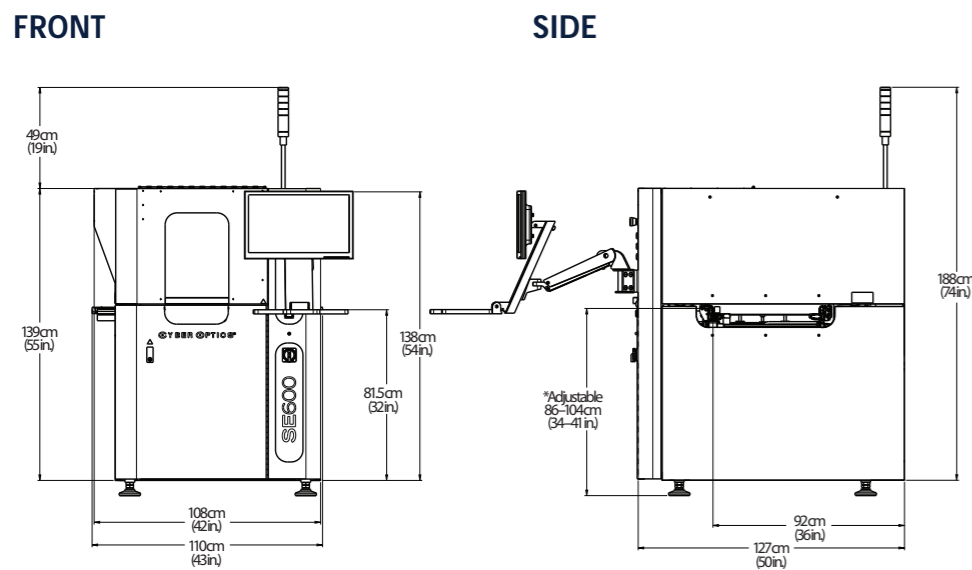
Ultimate Precision Accuracy with World-class Usability

SYSTEM SPECIFICATIONS	
Panel Size Capacity (Max)	510 x 510 mm (20.0 x 20.0 in.)
Panel Size Capacity (Min)	50 x 50 mm (2.0 x 2.0 in.)
System Dimensions (W x D X H)	110 x 127 x 139 cm
Weight	≈ 965 kg (2127 lbs.)
Maximum panel weight	3.0 kg (6.6 lbs)
Board Thickness	0.3 mm to 5.0 mm (0.01 in. to 0.2 in.)
Board edge clearance (Top)	Top: 2.5 mm (0.10 in.); Bottom: 3.0 mm (0.12 in.)
Component Clearance (Top)	Top (above belt): 20.1 mm (0.78 in.); Bottom: 25.4 mm (1.0 in.)
Conveyor Speed Range	150–450 mm/sec (5.9–17.7 in./sec)
Conveyor Adjustment	Automatic
FUNCTIONAL SPECIFICATIONS	
Maximum Inspection Area	508 x 503 mm (20.0 x 19.5 in.)
Field-of-View (FOV)	32 x 32 mm (1.26 x 1.26 in.)
X and Y Pixel Size @	High Resolution: 15 μm (0.6 mils); High Speed: 30 μm (1.2 mils)
Paste Height Range	50–500 μm (2–20 mils)
Height Resolution	0.2 μm (0.008 mils)
Maximum Board Warp	< 2% of PCB diagonals or max. of 6.35mm (0.25 in) total
Maximum Pad Size in FOV	15 x 15 mm (0.6 x 0.6 in.)
Measurement Types	Height, Area, Volume, Registration, Bridge Detection, Defect Review
Machine Interface	SMEMA, RS232 & Ethernet
Power Requirements	100–130 / 220–240V (10%), 50/60 Hz, 10–15 amps
Compressed Air Requirements	5.6 to 7.0 Kgf/cm² (80 to 100 psi @ 4 cfm)
PERFORMANCE SPECIFICATIONS	
Inspection Speed @ 30um	108 cm²/sec peak (80 cm²/sec avg)
Inspection Speed @ 15um	56 cm²/sec peak (30 cm²/sec avg)
Fiducial, Barcode and Skip Mark	All-in-one scan
Height Accuracy†	2 μm on a Certification Target
Gage R&R†	<<5%, 6 on Printed Circuit Board; <<2%, 6 on Certification Target
† Under controlled conditions	
OPTIONS	

SPC software, Barcode Readers (1D/2D), Programming Software: ePM-SPI/AOI & GC-PowerPlace, Offline Defect Review, Certification Target



SE600



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\*On standard parts only (excludes conveyor belts and other consumables); 1 year warranty on service

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Ultimate Precision Accuracy with World-class Usability  
 World's Fastest and Most Accurate 3D SPI

[www.cyberoptics.com](http://www.cyberoptics.com)

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TRUE MEASUREMENT, SUPREME QUALITY

- All-new, Standard Dual Illumination Sensor with calibration-free design
- Award-winning Newly Designed Software
- Multi-touch Screen with Intuitive Operation
- Best-in-class Accuracy and Repeatability
- Closed Loop Feedback Ready
- CyberPrint OPTIMIZER™ Ready
- Mounter Feed Forward Ready

