

GLSS Standalone Laser Singulation System



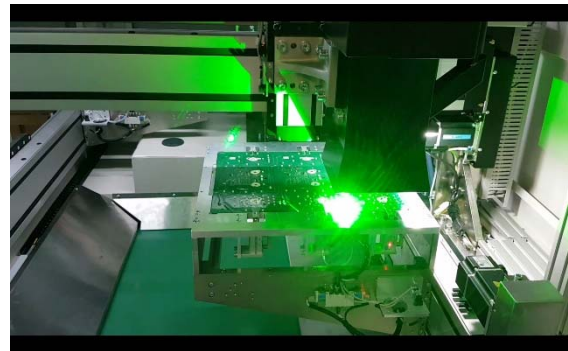
Standalone laser singulation system especially for ultra-thin PCBs

The GLSS is a standalone Laser singulation system specially designed to handle ultra-thin and flexible printed circuit board assemblies (PCBA) typically less than 0.6 mm in thickness.

The GLSS operates two tables for simultaneous cutting and load/unload operations for maximum production effectiveness and flexibility. Parts handling is as simple as positioning on a flat vacuum platen or a simple alignment fixture making the expenses usually associated with tooling less.

The GLSS employs a 10W green laser source with wavelength at 532 nm. The green wavelength is well-suited to PCB materials enabling clean cuts.

UV laser source is available as an option



Features:

- Large work area of 350 mm x 350 mm (13.5" x 13.5")
- Powerful servo motors powered axis
- CE Certification (Option)
- Green Laser (UV or IR laser options available)
- Move, Teach and Cut Visual Programming System

Specifications

Manipulator	
Configuration	X, Y, W & Z axis
Manipulator motors	4 axis AC brushless servo motors
Manipulator repeatability	± 0,02 mm
Resolution	± 0,01 mm
Board Positioning	Dual workstation with nest fixture or pin fixture
Panel Location	Located by tooling holes, edges of PCB or vacuum fixture
Loading	Manual Loading
Unloading	Manual Unloading
Panel Size	350 mm x 350 mm
Panel Thickness	less than 0,6 mm for FR4 and Polyimide
Laser System	
Green Laser	10 W DPSS Laser
Nominal Power	10 W @ 40 kHz
Laser Medium	Nd: YVO4
Peak Power	12,5 kW @ 40 kHz
Wavelength	532 nm
Repetition Rate	Single shot to 300 kHz
Cooling	Ambient air cooled
Pulse Width	<20 nS @ 40 kHz
Laser Life	50 hours approx..
Pulse Energy	250 µJ @ 40 kHz
Fume Extractor Unit	
Power	750 W rotary vane vacuum blower
Filtration	3 stage filtration with disposable filters
Vision system	
Video camera	High resolution CCD video camera
	PCB fiducial capturing or PCB edge positioning (optional)
Programming	
Inline	Vision assisted point to point manual teaching
Offline	CAD and manual program generation capability
Editing function	Dry run vision assisted / test run mode
Safety Features	
	"E" Stops, laser safety shutter, servo overload detection, class 4 laser enclosure work area with laser safety viewing windows
Machine dimensions and utilities	
Machine size W/D/H	1,30 m x 1,30 m x 1,80 m
Weight	800 kg
Power Supply	options available
Options:	
Bar code support	1D or 2D
Fiducial alignment	

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We are looking forward to your challenge!

pb tec solutions GmbH
Max-Planck-Straße 11

63755 Alzenau (Germany)

T.: +49 6023-94771-0
F.: +49 6023-94771-29

info@pbtecsolutions.de - www.pbtecsolutions.de