

GLMS Laser Cell



Ideal for marking of PCB's

GLMS is an Inline Laser Marking machine specifically designed to laser mark PCBs with high positional accuracy and repeatability.

It is capable of handling large format heavy PCBs, ultra-thin and flexible printed circuit board assemblies (PCBA).

The system is designed for High-Speed laser marking of formats ranging from 1D barcodes, 2D Matrix, QR codes and human readable characters as well as Image formats.

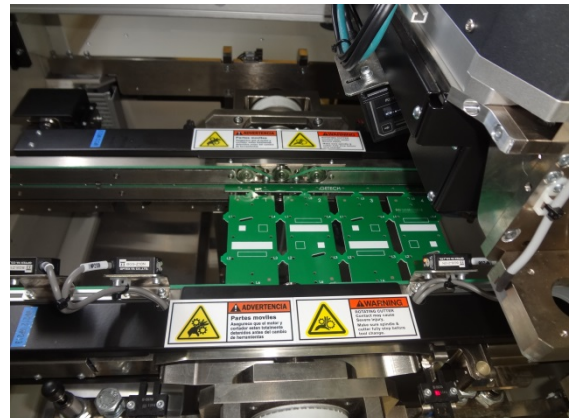
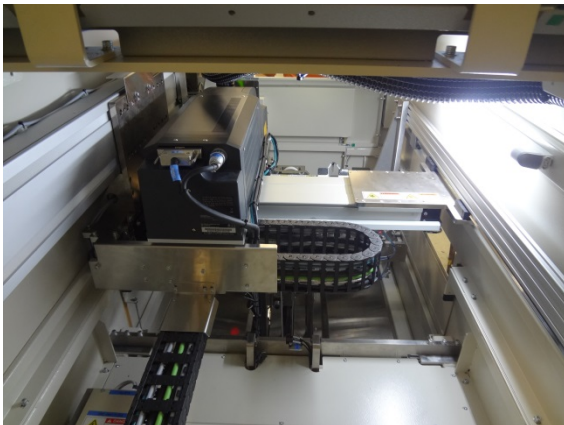
With a scanning system inside the GLMS each mark can be verified before being released to down-stream processes.

The GLMS has a large panel capability that can accommodate a single large panel or multiple smaller parts panelized on a single PCB.

The 30 watts CO2 laser wavelength (10.6µm) from Keyence is ideal for PCB applications. The high power effects a long lifetime of the laser source.

Features:

- Max. PCB size 550 mm x 570 mm
- Move, Teach and Marking Visual Programming System
- Programmable Z height adjustment
- 1D/2D mark verification by Scanner (Option)
- Class 1 Laser machine enclosure
- Quick product change-over
- Class 4 Laser Class
- Fume extraction (Option)
- Keyence 30 Watts CO2 Laser
- Link to customer's MES Server (Option)
- Internal flipper system for double sided marking
- Barcode, 2D codes, text and graphics capable
- SMEMA connection
- Programmable conveyor width adjustment
- Uninterruptable Power Supply (Option)
- ESD Edge belt conveyor
- Dual Lane (Option)



Specifications

Positioning System

Configuration	X and Y axis
Motors	Two axis AC brushless servo motors
Repeatability	± 20 µm
Resolution	± 10 µm

Work station

PCB Positioning	Pneumatic stopper
Panel Location	Located by tooling holes or edges of PCB
Panel Size	550mm x 570mm – single side marking 450 mm x 400 mm – double side marking
Panel Thickness	0,8 mm – 4,0 mm
Component height top	30 mm
Component height bottom	30 mm

Laser System

Laser Type	30-Watt Keyence CO ₂ Laser (class 4)
Cooling system	Ambient Air cooled (standard)
Guide Laser	Red Laser Pointer
Marking FOV	120 mm x 120 mm

Marking Formats

1D Barcode (Code39, Code128, ITF, 2of5, NW7, JAN)
 2D Code (QR Code, Micro QR Code, ECC200 DataMatrix, GS1 DataMatrix)
 DataBar (GS1 DataBar Truncated, Stacked and Limited)
 Logo Images (CAD Data, BMP/JPEG/PNG/TIF formats)

Vision System

Video Camera	High resolution CCD video camera
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Scanner System

Decoder	Vision System and Scanner
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Conveyor

Edge Clearance	3 mm
Max. payload	4 kg
Conveyor width	Auto adjust (programmable)
Conveyor speed	600 mm/sec. (minimum)
Conveyor flipper	yes

Safety Features

„E-Stops“, Laser stop, laser light protection, servo overload protection, enclosed work area

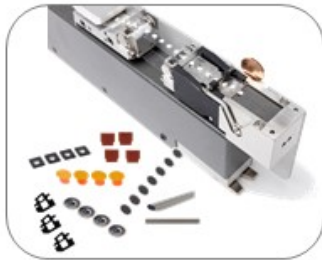
System dimensions, weight & utilities

Dimensions (W/D/H)	820 mm x 1800 mm x 1550 mm
Weight	600 kg
Power supply	208 – 240 volts
Air supply	6 bar

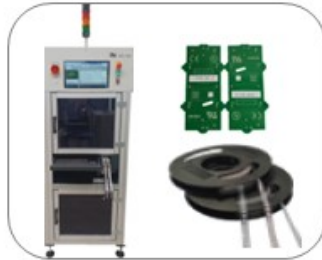
Available Options:

- Fiducial Option
- Link to customer's MES-Server
- PCB Flow direction according to customer's specifications
- Other Laser wavelength available
- Internal flipper system for double sided marking
- Fume extraction
- Dual lane
- Uninterruptable Power Supply (Option)

Our Product Portfolio



Label Feeder, also for special parts



Label/ Laser Marker and labels



Tape Feeder und accessories



Tray Handler / Reject Parts Conveyor



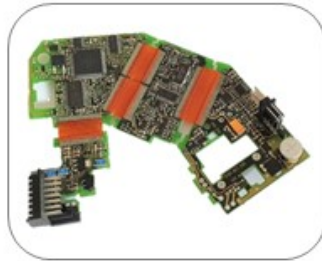
Manual Taping Systems



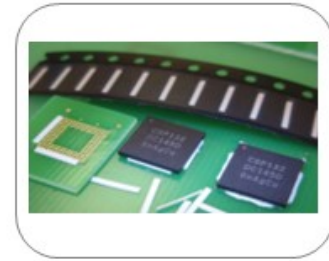
Automatic Packing Systems



Optical Bonding



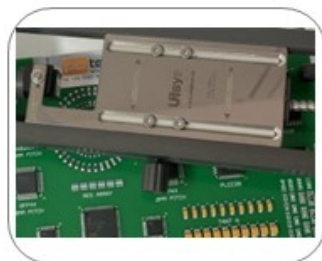
Thermal Bonding



Place-N-Bond Underfilm



Univers. In-System Programmiers



Reflow Inline Video Camera



Depaneling Systems