

PML 8000

● ANALYTICAL 200MM PROBER



FA / CHARACTERIZATION / VERIFICATION

Robust and stable prober ideal for diverse applications such as small geometry probing, applications using high power optics, design debug, wafer level reliability (WLR) and electro static discharge (ESD)

DESIGNED FOR ANALYTICAL PROBING

The PML 8000 analytical prober for up to 8-inch wafers delivers a cost effective prober for failure analysis, device characterization and inline process verification. Its compact base design and extensive feature set are ideally suited for diverse applications, including: small geometry probing; applications using high power optics; design debug; wafer level reliability (WLR) and electro static discharge (ESD).

CONFIGURABLE FOR MANY APPLICATIONS

PML 8000 can be configured with ShieldMaster™, a guarded environmental chamber, to accommodate low-level and low temperature leakage requirements.

With controls located at the front of the system, the PML 8000 offers fine and coarse positioning of the 8-inch by 8-inch XY stage. The Z control of the platen is also situated at the front of the system, offering 2 inches of Z movement as well as 0.015 inch fine control for probing.

Setup, positioning and adjustment of manipulators on the PML 8000 are easy and its robust, stable probing platform accommodates a wide range of accessories, including: manipulators; standard and custom chuck plates; manual, motorized or programmable microscope mounts; and microscopes from leading optics manufacturers, and more.

Should packaged device testing be required, the PML 8000 includes a standard vice-chuck. This unit has adjustable clamps that range from 1-inch to 6-inches and offers 0.5-inches of clearance between the PCB and lead screw for optimal safety.

PML 8000 offers cost effective probing of wafers or packaged devices for semiconductor, research and education.

PML 8000 FEATURES TO MAXIMIZE PERFORMANCE

- Small footprint
- Easily configured for different applications
- Robust, highly stable probing platform
- Vice chuck
- Large platen area

SPECIFICATIONS

XY STAGE

X Travel	210 mm (8.25") manual travel
Y Travel	235 mm (9.25") manual travel
Pitch	25 mm (1") lead screws

LINEAR MOTION GUIDES

Concentric fine/coarse controls for stage operation 1:1 ratio for fast positioning (25 mm/1" rev). Control wheels at front of machine, isolated from lead screws.

CHUCK

205 mm (8") electroless nickel-plated aluminum
Flat to within 8 μ m (0.0003")
Micrometer drive theta, 15°
Fixed height
Packaged device holder

PLATEN

10 mm (0.4") thick open front electroless nickel-plated steel top supported by 4 steel pillars
50 mm (2") manual height adjustment - 4 corners driven
Height adjustment via either of the two front wheels
Horizontally operated lever for fine vertical lift
Suitable for magnetic or vacuum base manipulators
Separation lift (option) 10 mm (0.4")
Probing lift 0.3 mm (0.012")

PHYSICAL DIMENSIONS

Width	620 mm (24.25")
Depth	680 mm (27")
Height	610 mm (24")
Weight	84 kg (185 lb)

SERVICES

Vacuum	0.5 cfm @ 20" Hg
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OPTIONS AND ACCESSORIES

Manual, motorized or programmable microscope mount
Lasers for semiconductor failure analysis
Package device holder
Vacuum manifold
Probe card holder
Chuck plates
ShieldMaster™ environmental chamber

PROGRAMMABLE MICROSCOPE MOUNT (PMM)

XY Resolution	1 μ m
XY Accuracy	\pm 7 μ m
XY Repeatability	\leq 2 μ m
XY Travel	100 mm
XY Speed	Up to 6 mm/s
Z Resolution	1 μ m
Z Speed	Up to 3 mm/s
Z Repeatability	\leq 2 μ m
Z Lift Travel	100 mm
Z Lift Method	Motor



Programmable Microscope Mount (PMM)

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