

# PML 8000

## Analytical Prober



The PML 8000, analytical prober, delivers an economical 8-inch probing platform 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). The PML 8000 also offers seamless integration into emission microscopy.

With controls located at the front of the system, the PML 8000 offers fine and course positioning

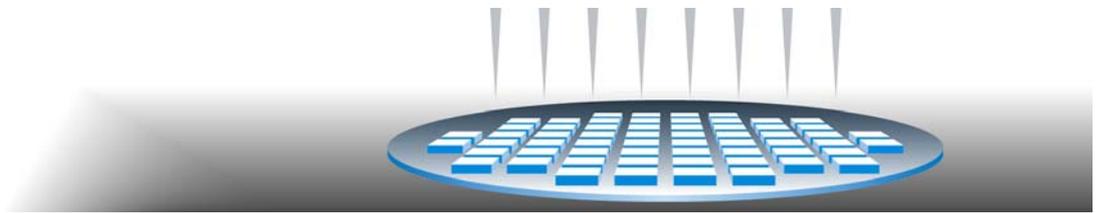
of the 8-inch by 8-inch XY stage. The Z control of the platen is also situated at the front of the system, offering 2 inches of Z movement as well as 0.015 inch fine control for probing.

Setup, positioning and adjustment of manipulators on the PML 8000 is easy and it may be configured with a wide range of accessories. 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.

The PML 8000 offers cost-effective probing of wafers or packaged devices to meet the needs of the semiconductor, research and education industries.

### Features

- Small footprint
- Easily customizable for different applications
- Highly stable design
- Vice chuck
- Large platen area
- 'In-platen' PCH theta control



## Technical Specifications: PML 8000

### Stage

210mm (8.25in) manual X travel  
235mm (9.25in) manual Y travel  
25mm (1in) pitch lead screws

### Linear Motion Guides

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

### Chuck

- 205mm (8in) electroless nickel-plated aluminum
- Flat to within 8 $\mu$ m (0.0003in)
- Micrometer drive theta, 15 degrees
- Fixed height
- Packaged device holder

### Platen

- 10mm (0.4in) thick open front electroless nickel-plated steel top supported by 4–32mm (1.25in) steel pillars
- 50mm (2in) 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)      10mm/0.4in  
Probing lift                      0.3mm/0.012in

### Microscope Stage

- 25mm x 25mm (1in x 1in) manually operated
- Adjustable planarity
- High stability, supported on machine base
- Accommodates Mitutoyo, A-Zoom, Leica , etc.

### Base

- Cable access panels
- Highly stable single-piece aluminum casting



### Services

0.5bar (15in Hg) Vacuum

### Physical Dimensions

Width:            620mm (24.25in)  
Depth:           680mm (27in)  
Height:           610mm (24in) incl. eyepieces  
Weight:           84Kg (185lb)

### Options and Accessories

- Microscope mounts
- Lasers for silicon microsurgery
- Package device holder
- Vacuum manifold
- Probe card holder

All specifications are subject to change without notice.  
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