

PG2000 Semi-Automatic Prober



The Pegasus PG2000 is specifically designed for production probing applications involving semiconductors, LEDs and MEMS devices. Especially, PG2000 ideally meets the LED industry requirement by way of its area-scanning technology to probe LED die mounted onto blue tape/ ring carries.

- Fast – Simultaneous XY motion for increased throughput
- Accurate – Advanced controller software addresses intrinsic stage errors
- Easy-to-Use – Simple push-button control and menu-driven operation
- Versatile – Ideal for production probing, especially LED and MEMS, and characterization
- Compatible – Interface compatibility with most test environments
- Robust – Reliable, heavy-duty performance
- Easy Maintenance – System diagnostics for easy and quick maintenance and repair

Performance Features

- Tiny structure with solid frame and 4 wheels for easy hauling
- Dark-room lid to protect from the interference of environmental lights
- Friendly Window system operation software with Chinese/English display and real-time Mapping map
- CCD scanning system enables super fast location and offers coordinate's data
- One-button-to-end operation function for LED probing
- Integrated software with WEIMIN tester simplifies the operation procedure of LED probing

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Technical Specifications

XY Stage

- Type: High precision recirculation ball lead screws
- Stage Travel: 210mm x 210mm (8.3" x 8.3")
- Resolution: 0.5 μm
- Accuracy: $\leq \pm 7 \mu\text{m}$
- Repeatability: $\pm 4 \mu\text{m}$ (0.0001")

Z Stage

- Type: Stepper motor drive - linear bearings
- Stage Travel: 11.5mm (0.45") max
- Resolution: 1 μm
- Accuracy: $\leq \pm 2 \mu\text{m}$
- Repeatability: $\pm 4 \mu\text{m}$ (0.0001")
- Loading: 20kg max

Revolution Theta

- Angle: $\pm 10^\circ$
- Resolution: 0.001 $^\circ$

Chuck Plate

- Material: High strength alumina alloy (gold or nickel coating)
- Flatness: $\leq 15 \mu\text{m}$

Probe Holder

- Manipulation: X,Y,Z 3 axis adjustable
- Resolution: 10mil (1/100") per turn
- Edge Sensor**
- Type: Spring force contact
- Life of Needle: > 1,000,000 contact

Microscope

- Eyepieces: 20X
- Object lens: 1X ~ 4.5X
- Magnification: 20X ~ 90X

CCD Camera

- Telecentric Lens: 0.8X / 1024 x 768 pixels
- Scanning area: 8mil x 8mil ~ 80mil x 80mil
- Scanning time: 15k / 2minutes (2" wafer)

Physical Specifications

- Size: (signal tower and monitor excluded) 84 (D) x 73 (W) x 142 (H)
- Weight: < 200kg

Vacuum Pump:

- 0.5 cfm at 20"Hg (min)

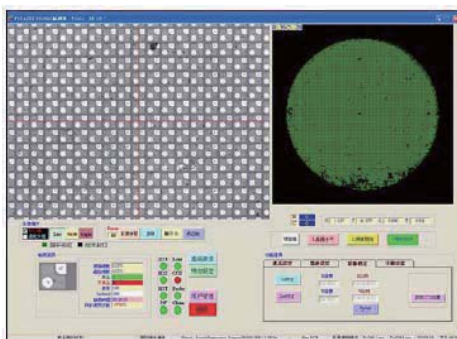
Power Consumption:

- 100 ~ 240VAC, 47 ~ 63Hz, < 10A

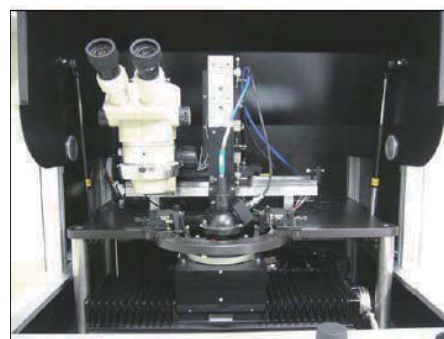
Option:

- Edge sensor: 1 ~ 4
- Inker: 1 ~ 2
- CCD telecentric Lens 0.5X
- Spectral Lam Measurement
- Microscope with verity magnification

Movement Time (ms)	Chuck Lift (μm)		
	150	250	350
203.2	58.2	80	102
304.8	63.2	85	107
508	71	97	115
1016	86	108	130



Friendly Window system operation software with Chinese/English display and real-time Mapping map



Edge Sensor