

IPT 6000

LED CHIP/WAFER PROBING SYSTEM

- with fully integrated Prober & Tester in one single system

Best Satisfaction To Your Needs



Unique Product Features

- Fully integrated Prober and Tester - Improving speed by 20%~50%
- Brightness measured directly by silicon PD instead of optical microscope for improved accuracy
- Special shield design to eliminate back light distraction
- Built-in Optical Linear Encoder ensures long-term positioning precision
- Recordable Alert System providing customized warnings to different conditions

IPT 6000 LED CHIP/WAFER PROBING SYSTEM

The New Integrated Era

Integrated Techniques; Integrated Benefits; Integrated Services

Fittech's R&D is composed of the most elite talents of various fields (including Mechanical Vision, Optical-Electrical Measurement, Mechanical Design, Electrical Control, Circuit Design, and Automatic Control). The latest LED Chip/Wafer Probing System, IPT-6000, was developed to fulfill users' need by providing an integrated system of Prober and Tester which improves productivity and accuracy.



Likuan - FitTech

The Benefits of Integration

■ High Speed Performance

The IPT-6000 probing speed is 20%~ 50% faster than probers in the market today. The fully integrated prober and tester enhance efficiency and productivity by eliminating extra communication interface.

■ Only one monitor, one mouse, and one keyboard

Unlike other non-integrated machines, IPT 6000 combines probing and testing operations into one. It provides operators simplified procedures and reduces the possibilities of human error. The training period for a new operator will be greatly reduced.

■ One Touch Function

To provide ease of operation, IPT 6000 does achieve the "One Touch" ideality. Only with a click, IPT6000 will automatically run the whole process of scanning and probing.

■ Unified After-Sale Service

No more confusion of responsibilities between the prober and tester supplier when problem arises. It is one stop after sale service for IPT 6000 provided by Fittech.



The most accurate testing result of optical & electrical data

■ Design with CIE 127 standard

Most testers in the market use optical microscope to measure the brightness. When the chip is not positioned precisely, error may be exaggerated leading to false reading. IPT 6000 adopts the CIE 127 standard design concept by measuring brightness directly with a silicon photodiode incorporated with spectrum to minimize error.

■ Using Keithley 2400 Source Meter to measure the LED electrical

Keithley 2400 is a high performance electrical measuring instrument which has become industry standard in providing quality measurements used by LED manufacturers.

■ Special Light-proof case design, avoiding the effect of back light

IPT 6000 minimizes every factor that may affect the accuracy of the testing result to ensure highest test precision.

■ Optical software self-rectifying technique

IPT 6000 uses software to measure the actual intensity to avoid errors which may be caused by visual function detector.



Other important functions

■ Optical Linear Encoder built-in, making sure the long-term precision of positioning

■ Programmable random chip check, reducing the cost by human effort

■ Using "Map" for operator to easily monitor the testing process and result

■ X-Y Pitch self-rectifying

■ Auto alignment mark positioning

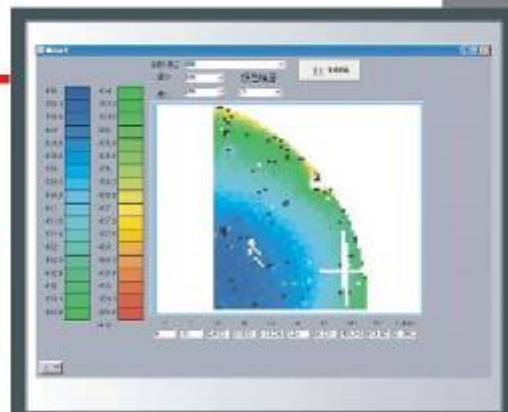
■ Auto horizontal line rectifying

■ Auto altitude compensating

■ Special probing tips holder design, avoiding elastic deformation

■ Easily disassemble electric control box for maintenance

■ Humanizing recordable alert system



Every design detail is to best satisfy your requirements and to enhance productivity and accuracy.

Specifications

■ Optical & Electrical

Item	Description	Unit	Specification
Voltage	Measurement Range	V	0-200
	Best Resolution	μ V	5
	Best Accuracy	%	0.02
Current	Measurement range	A	0-1
	Best Resolution	pA	10
	Best Accuracy	%	0.035
Spectrometer	Wavelength range	nm	350-1050
	Resolution	nm	1.5
	Repeatability	nm	0.4
Brightness	Measurement Range	mcd	0.00-65000
	Repeatability	%	3

■ Mechanical

Item	Description	Unit	Specification
Working area	For 2 \ 3 \ 4 \ 5 inches wafer	mm	160×160
Chuck	Planarization	mm	0.01
Repeatability	X,Y,Z axis	μ m	2
Scanning times	For 2 inch wafer	min	3
X-axis	Max travel stroke	mm	160
	Resolution	μ m	0.4
Y-axis	Max travel stroke	mm	160
	Resolution	μ m	0.5
Z-axis	Max travel stroke	mm	8
	Resolution	μ m	0.2
θ -axis	Rotation range	Degree	\pm 30
	Resolution	Degree	0.002
Machine Vision	Monitor/Camera		15'' LCD/CCD
	Illumination		Remote control
	Focus		Manual adjustment
	Magnification		2× / 4×
	Alignment		Auto alignment
Utilities	Machine size W*D*H	mm	732*620*520
	Control box size W*D*H	mm	550*710*420
	Machine weight	kg	120
	Power source		220V, 50/60Hz
	Power current		5A
	Air pressure	Kgf/cm ²	5
	Air flow rate	NL/min	45

Optional Function

■ ESD Tester

With the increasing multiple applications of LED, the ESD function become more essential for some manufacturers for the reliability requirement of LED chips . It has still been a heavy job to pick some chips from a 15000-chips wafer by human labors. IPT 6000 provides an optional function of built-in ESD to implement a better solution.

www.likuan.com.tw

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