

New Product !

UNISOKU
SCIENTIFIC INSTRUMENTS

Ambient 4-probe Surface Measurement System

UP2000-4P

This system enables various kinds of "micron-order" to "nano-order" surface electricity measurements and manipulation in the atmosphere.

Main applications

- Micro to nano-manipulation of samples
- Measurements of various kinds of electric properties of sample surfaces by multi-probing



4-probe stage and optical microscope



Control unit



Notebook PC

- You can control the positions of each of the four probes individually along the three axes, X, Y, and Z, using a personal computer and a remote control, while observing the sample surface under an optical microscope.
- You don't need to make troublesome sample position adjustments, as the sample stage can also be moved independently in the X and Y directions.
- This system can also be used to heat samples.
- You can manipulate samples easily and intuitively while observing the sample surface shown on the screen of your personal computer.

We can also manufacture high-vacuum systems for probing and surface measurements in a vacuum.

Please feel free to ask us any questions you may have.



High vacuum 4-probe stage and optical microscope (custom-order)

Instrumental components subject to change without prior notice for improvement in performance.

UNISOKU Co., Ltd.

www.unisoku.co.jp

Ambient 4-probe Surface Measurement System

UP2000-4P



Configuration

4-probe stage main body (with an optical microscope)	1
4-probe controller (with a remote control)	1
Notebook PC for control and observation (with a control program)	1
PT-Ir probes	1 set

Specifications

Optical microscope and CCD camera

Minimum resolution	2micro m to 13 micro m (when the standard lens is used)
	Equipped with a zoom function as standard
	CCD camera 2 million pixels
	Maximum display size 1600 x 1200
	Equipped with an illumination source and fiber as standard

4-probe stage

Size	140 mm long x 140 mm wide
Inner diameter of stage case (optional)	200 mm dia.
Maximum travel distance	XY 5 mm, Z 3mm
Fine positioning travel distance	1 micro m
Driving method	Pulse control and linear control modes

Sample stage

Maximum travel range X-axis	10 mm
Y-axis	5 mm
Driving method	Pulse control

* The heating and cooling stages are available as options.

Sample holder

Maximum sample size	10 mm x 10 mm
	2 contacts for applying the current for heating
	* 5 contact terminals are available for users.

Probes

Probe tip diameter	0.5 mm to 0.3 mm
	Other probes are available as options
	We offer Pt-Ir and tungsten probes.
	Each probe tip is provided as a measurement terminal.

Control unit

Dedicated 4-probe controller

Input voltage	100 to 115 VAC (50 Hz, 60 Hz)
	200 VA (MAX)
Input	Dedicated control terminal
Output	Dedicated 4-probe terminals (4 outputs)
Display function	LED to indicate the pulse-controlled movements in the X, Y and Z-directions

Dedicated stage controller

Input voltage	100 to 115 VAC (50 Hz, 60 Hz)
	100 VA (MAX)
Output terminal	Stage control terminal
	X and Y axes (manually switched)
Input terminal	Dedicated external remote control terminal
	Equipped with a remote control as standard

Personal computer for control

Notebook PC (compatible with Windows XP and Windows VISTA)
Pre-installed with the dedicated control software
Equipped with a dedicated remote control as standard

* Electric property measurement circuits and other necessary items should be prepared by the user.

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