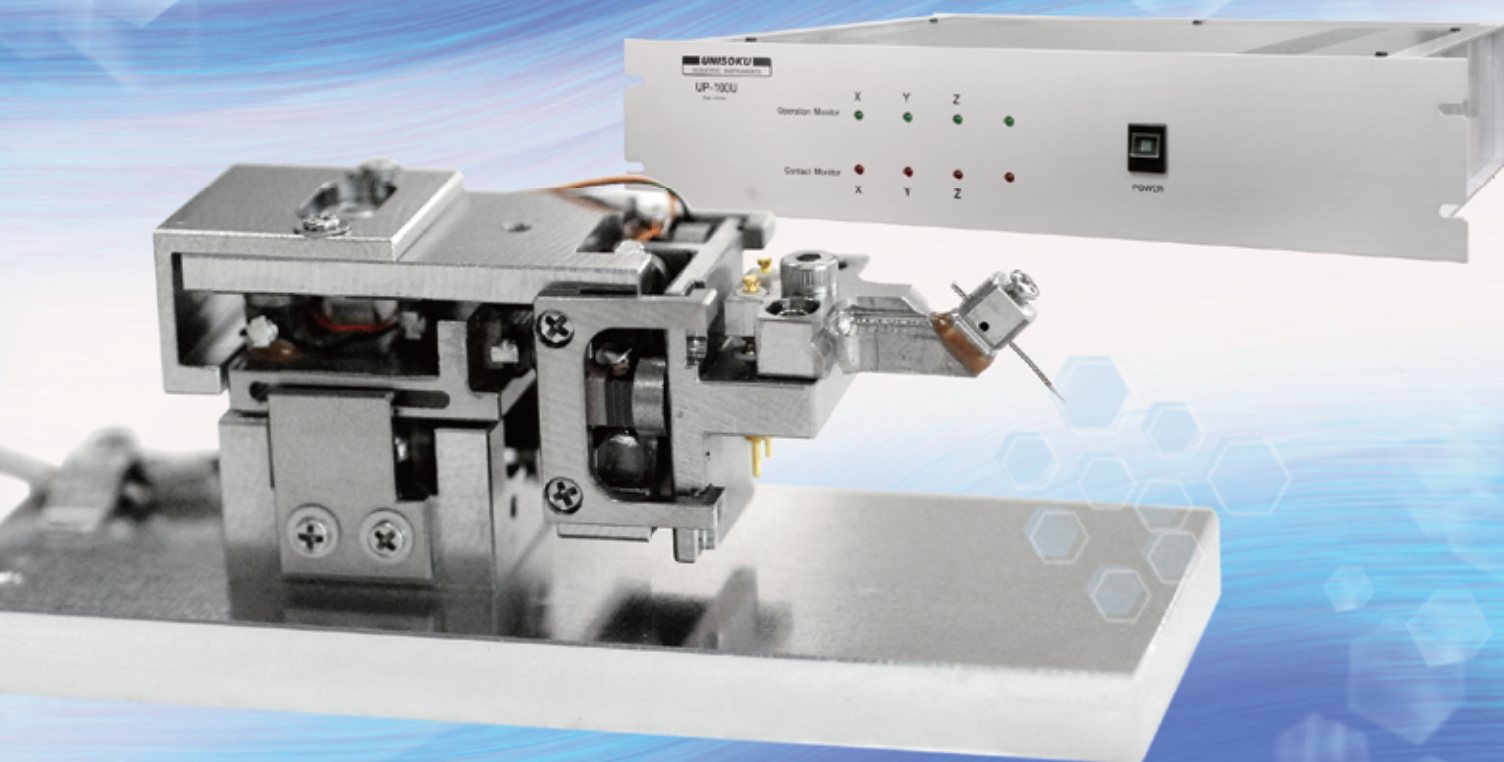


XYZ 3-axis Nano-manipulator/prober

UP-100U

UP-100U is a manipulator that can travel in the X, Y, and Z axes at the nanometer level. In combination with SEM/FIB/optical microscopes that are on the market, it can be used in a variety of ways such as manipulating/probing on a micrometer/nanometer scale.



Accurate and easy operation

Compatible with Windows PCs. You can position things quickly and accurately by switching between the coarse (pulse mode) and fine (DC mode) travel settings.

Works in a wide range of operating environments

This device can be used in a wide range of operation/measurement environments, from atmospheric pressure to ultrahigh vacuum, and from room temperature to low temperatures.

High cost performance

High functionality/high performance and low cost are both achieved.

Many uses

This device can be used for various applications, such as nano-manipulation with a single unit and/or probing with multiple units.

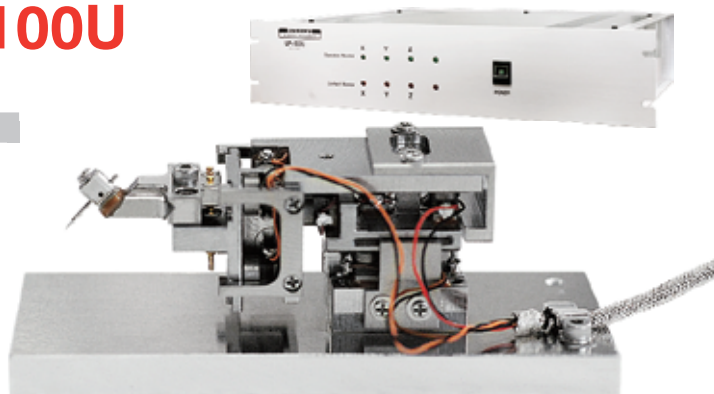
- Nano-manipulation
- Probing (IV measurement of semi-conductor nano-devices, resistance measurement, EBIC measurement)
- Wide range of applications on a micrometer/nanometer scale

XYZ 3-axis Nano-manipulator/prober

UP-100U

Configuration

1. Main unit	1 unit
2. Controller	1 unit
3. Accessories	1 set
4. Windows laptop (optional)	1 unit



Specifications

1. Main unit

Maximum travel distance	
Pulse (coarse) mode	X and Y axes 5 mm
	Z axis 3 mm
DC (fine) mode	X and Y axes 1 micro m
	Z axis 1 micro m
Minimum travel distance (resolution)	
Pulse (coarse) mode	150 nm or less (XYZ axes)
DC (fine) mode	0.5 nm or less (XYZ axes)
Operating environment	
Temperature	4 K to 310 K, baking temperature: 373 K or less
Pressure	Near atmospheric pressure or 10^{-2} Pa - 10^{-8} Pa (Due to discharge from piezoelectric elements, this device cannot be used in certain vacuum environment ranges)
Connection cable (output)	Standard control terminal (Dsub-15) 2 m/ 1set
* Works in ultrahigh vacuum/ low temperature (job order production)	2 m/ 1set
Body dimensions (approximate, includes protrusion)	
	25mm(H) X 50mm(D) X 20mm(W)
	Main body (without probes)
Body weight	less than 60 g
	Main body (without the attachment base)

2. Controller

Input voltage	100 VAC (50/60 Hz) (the other input voltage :option)
Power consumption	100 VA or less
Temperature range	+5 deg C to +40 deg C
Humidity range	15% to 80%
Input/output	Control terminal (Dsub-15)
Dimensions	480mm(W) X 100mm(H) X 460mm(D)
Weight	less than 6 kg

3. Accessories

Standard control software CD-ROM	1
Connection cable (USB)	
Windows PC/Controller	(3.0 m) 1
Connection cables	
Controller (5 m)	(5 m) 1 (connectors are separate)
AC cable (1.5 m)	(1.5 m) 1

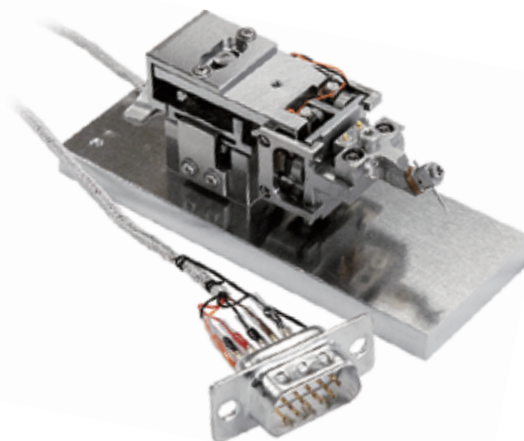
4. Windows laptop (optional)

Specifications

OS	Windows XP
Interface	USB (device uses 1 port)
CD-ROM drive	1
Memory	512 MB or more
HDD	10 GB or more

Note:

Please contact us directly for questions about compatible SEM/FIB types.



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