IPS-TRIAX

KitStart for femto level I-V, pulsed I-V&C-V measurement.



IPS-TRIAX is a cost-effective probing solution for optimized I-V/C-V measurements. This system incorporates everything you need for tests and measurements down to fA levels. The modular design of IPS allow you to upgrade your IPS-TRIAX to a higher system for RF, high current or high voltage tests and meausrements by simply replacing parts of this system. Your current investment will be protected for your future needs.

Compact design of IPS allows you to put it on a table top vibration isolation platform for space saving purpose.The probes to pads contact quality is protected during the meausurement time. As part of this KitStart system, we offer DTP100 or DCP100 probing options for stable and backlash free probe placement. We have S10-TRIAX and FemtoProbe probing kits for precise I-V probing and CPA-10 for optimized C-V measurements.

We have two options for chuck stage: AccuStage and SimpleStage. SimpleStage has coarse X-Y movement and is used for samples with large geometric probing structures and accurate positioning is not necessary. AccuStage allows you to achieve accuracy in X-Y-Z movement when probing on tiny pads. Both stages are built on air bearing stage for coarse but smooth X-Y movement.

Features

- Less than 10fA(or100fA) system current leakage; Less than 10fA residual capacitance.
- Best known test methods for DC parametric tests and meausurements.
- Modular design, easy to upgrade system when requirements change.
- Intuitive manipulation, effortless to use the probe station, minimize training efforts.

IPS-TRIAX

Boom Stand Microscope Holder

Pivoted desgin with locks. Easy to move and lock the microscope position.

Triax Chuck

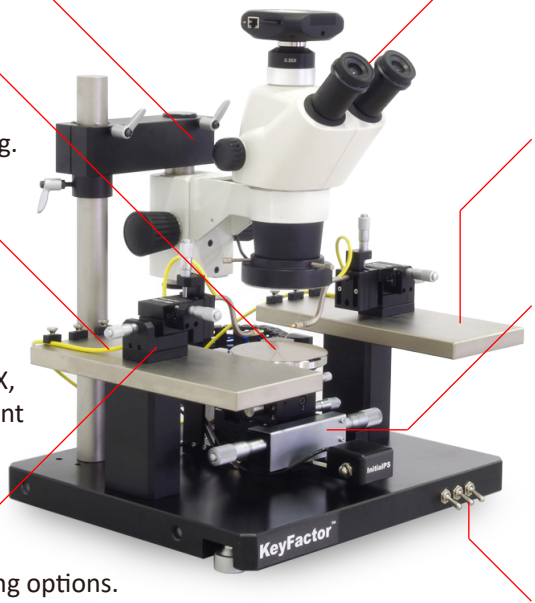
4 to 8 inch available upon request.
<+/-2.5 micron planarity.
Low noise triax design for device biasing.

Optimized Signal Path

Optimized triax cable for I-V/C-V, pulsed I-V measurements down to fA levels.
Rigid probe arms allow stable probing.
Application oriented KitStart: S10-TRIAX, FemtoProbe for precise I-V measurement or CPA-10 probes for accurate C-V measurement and LCR applications.

Probing Options with Accuracy

DTP100 or DCP100 backlash free probing options.
Down to 3 micron probe placement accuracy.
Intuitive manipulation, ease of probe to pads alignment and touchdown.



Trinocular stereo microscope

6.7X zoom
100X magnification
C-Mount included for cameras
LED illumination for excellent image contrast and long lifetime.

Universal Probing Platens

Rigid and stable design.
Compatible with magnetic or vacuum mounting micropositioners.

AccuStage or SimpleStage Options

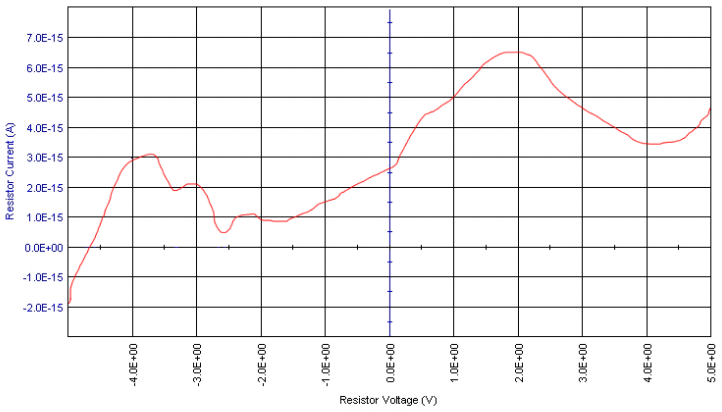
Air Bearing stage for intuitive mani -pulation with coare but smooth X-Y movement.
AccuStage with precise X-Y-Z and theta rotation.
SimpleStage with coarse and fine theta rotation.

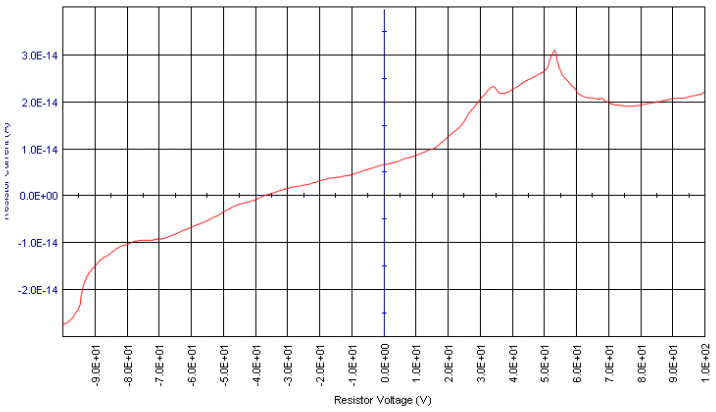
Vacuum Control

Independent control for chuck and calibration chuck vacuum.

Eletrical Performance (I-V measurement)

	Current range	1pA
	Voltage range	0~5V, 0~100V
	Current leakage	<10fA(FemtoProbe), <100fA(S10-TRIAX0)
	Breakdown voltage	500V





*These test results are acquired by Keithley 4200. Probe station set up: IPS-COAX-AS-Stereo, DCP100(2SET) , FemtoProbe/S10-COAX-BNC(2SET) with 10 micron probe tips floating. Room Temperature 25℃, RH<45%.

Eletrical Performance (C-V measurement)

Current leakage	<10fA
Frequency	>150MHz
Capacitance	<10fF
Impedance	50 Ohm

*Capacitance is measured by Keysight 4980A LCR. Probe station set up: IPS-COAX-AS-Stereo, DCP100(2SET) , CPA-10(2SET) with 10 micron probe tips on a gold pad. 1 meter coax cable, 4-terminal-pair connection. Room Temperature 25℃, RH<45%.

Ordering Information

IPS-TRIAX-AS-Stereo	4 or 6 inch chuck IPS probe station with AccuStage and 100X stereo microscope.
IPS-TRIAX-SS-Stereo	4 or 6 inch chuck IPS probe station with SimpleStage and 100X stereo microscope.
IPS-MB	Optional rigid and stable mounting bridge for microscopes. Offers a high rigidity platformfor microscopes.
DTP100	5 micron accuracy micropositioner for stable and backlash free probing.
DCP100	2 micron accuracy micropositioner for stable and backlash free probing.
S10-TRIAX	Probe holder for I-V measurement, 2m cable, TRIAX connector. Current leakage <100fA.
FemtoProbe	Less than 10fA current leakage
CPA-10	Probe for precision C-V measurement.
CA-SSMC-BNC	Coax cable assembly for LCR meters. 1/2/3 meters available upon request.
CA-TRIAX-SMA	High resolution measurement triax cable assembly. 2m, TRIAX to SMA connector.
CAM-MP200-HDMI	High resolution camera with snapping, recording and size measuring. HDMI connector to LCD monitor.
CAM-MP200-VGA	High resolution camera with snapping and recording. VGA connector to LCD monitor.
VIT-TableTop	Table top vibration isolation table.

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