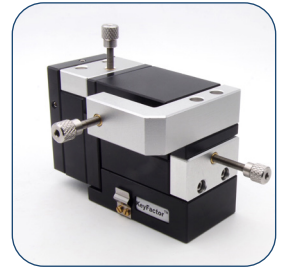
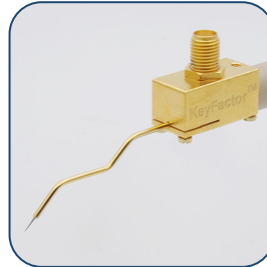


# KeyFactor™

One of the key factors to your tests & measurements.



## Probe Station Systems and Accessories Catalog



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# Probe Station Systems

Find out our advanced probe station systems for precision I-V/C-V, pulsed I-V, RF/mmW tests, high voltage/current FA Tests, MEMS, Optoelectronic tests, etc.

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# IPS

A 4" to 12" cost-effective probe station with upgrade capability.



## Application

DC, RF Tests;  
MEMS, NEMS, Optoelectronics Tests;  
,etc.

## Features

Application oriented – Kitstart test kits for various applications.  
Cost-effective – Users can start with a very cost-effective set up.  
Modular design – Various modular options allow user to upgrade the system easily.  
Unique X-Y– Air bearing stage for fast movement and micrometer heads for accurate X-Y movement.

## Description

Probe stations are very expensive and durable lab equipment. Many users only have very limited budgets at the beginning but their test requirements could change over time.

InitialIPS allows you to start with a probe station with very competitive price. You can upgrade the system easily as their test requirements change. With the modular design, you simply choose from various chuck options, microscope options and test kits. The ease of upgrade capability protects your current investment for future need.

## KitStart for IPS Probe Station

### *IPS-BIV for Basic I-V measurements*

IPS-BIV is a cost-effective probing solution for basic I-V measurements. This system incorporates everything you need for tests and measurements down to nA levels. As part of this KitStart system, we offer DTP100 or DCP100 probing options for stable and backlash free probe placement. S10-BA probe holder has a rigid structure with built-in cable and shrouded banana plug for optimized connection to tests and measurements instruments, such as source and measurement units, multimeters, power supplies, etc.



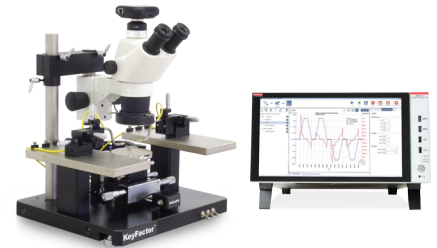
### *IPS-COAX KitStart for Optimized I-V, C-V, Pulsed I-V Measurements.*

IPS-COAX 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 pA levels. As part of this KitStart system, we offer DTP100 or DCP100 probing options for stable and backlash free probe placement. We have S10-COAX probing kits for precise I-V probing and CPA-10 for optimized C-V measurements.



### *IPS-TRIAx KitStart for High Resolution I-V, C-V, Pulsed I-V Measurements.*

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. 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.

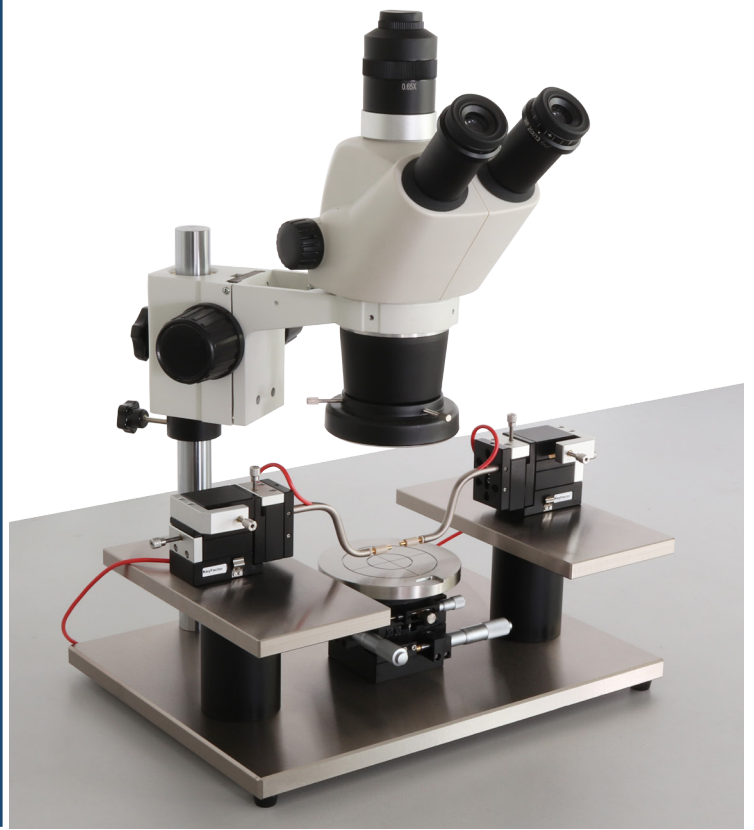


## Ordering Information

IPS-BIV-AS-Stereo	4~12 inch chuck IPS probe station with AccuStage and 100X stereo microscope. Basic I-V measurement package.
IPS-COAX-AS-Stereo	4~12 inch IPS probe station with AccuStage and 100X stereo microscope. Optimized I-V/C-V, PIV measurement package.
IPS-TRIAx-AS-Stereo	4~12 inch chuck IPS probe station with AccuStage and 100X stereo microscope. High resolution triax set up for semiconductor characterization systems.
IPS-FA	4~12 inch chuck IPS probe station with AccuStage and Superscope. High resolution triax set up for semiconductor characterization systems.
DTP100	5 micron accuracy micropositioner for stable and backlash free probing.
DCP100	2 micron accuracy micropositioner for stable and backlash free probing.
HPP100	0.5 micron accuracy micropositioner for submicron probing.
RFP100	3 micron accuracy micropositioner for RF probing.

# SimplePS

A 4" platform for basic I-V/  
CV measurement.



## Application

Basic I-V/C-V, PIV Tests;  
MEMS, NEMS, Optoelectronics Tests;  
,etc.

## Features

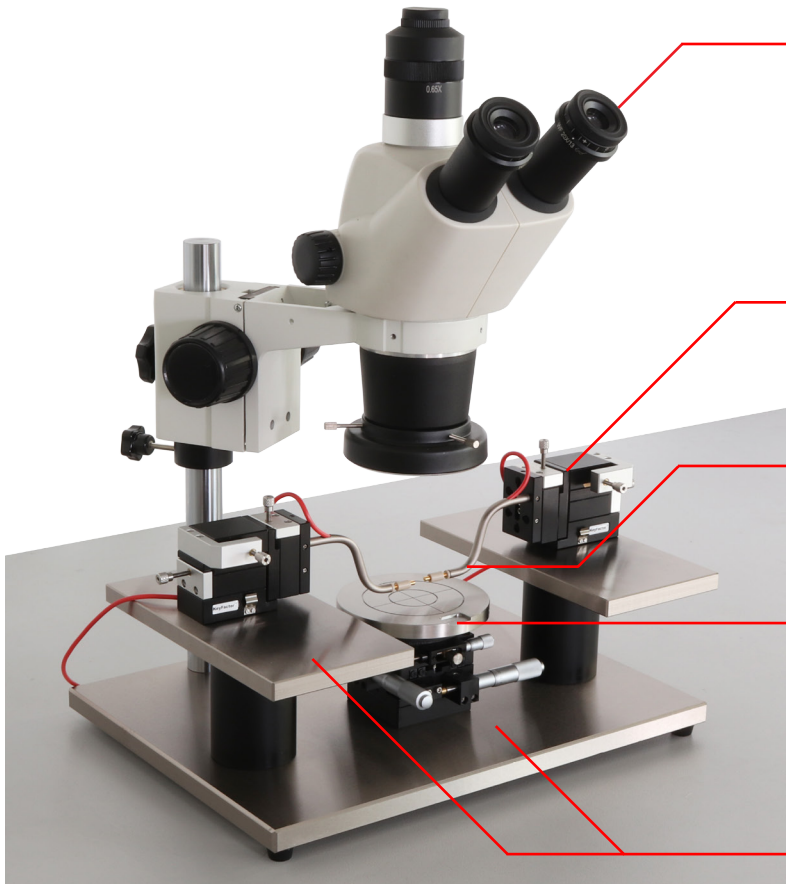
Application Oriented - KitStart package for I-V and C-V measurement.  
Low Budget, high quality - Includes SimplePS, DTP100, S10 probe holders and other accessories.  
Low profile, compact footprint design - Very ideal for space tight labs.

## Description

SimplePS offers a very simple platform for basic I-V/C-V probing with DTP100 micropositioners. With KeyFactor's S10 series probing accessories, the system can be set up to work with multimeters, power supplies, SMUs(Source and measurement units), LCR, etc.



## Product Highlights



### Stereo Microscope

High resolution MOTIC stereo microscope.  
110mm working distance, suitable for probing.  
Up to 100X magnification, for probing of pads/wires  
down to 30 microns.  
Cameras available upon request.

### DTP100 Micropositioner

5 micron accuracy, highly stable for probing on  
pads or wires down to 10 micron.

### S10 Series Probe Holder

Banana plug, BNC, SMA and TRIAX cable assemblies  
to meet your test requirements.

### 4 in. Chuck and Stage

Stainless steel sample stage.  
With theta rotation for probe alignment.  
Fine XY stage for accurate movement.  
Magnetic stage for coarse movement.

### Platen and Base

For up to 4 DTP100 positioners. Larger space available  
upon request.  
Low profile design, steel base, rigid and stable.

# HAPS

A 8" to 12" probe station with excellent stability and reliability.



## Application

DC, RF/mmW Tests;  
MEMS, NEMS, Optoelectronics Tests;  
,etc.

## Features

Application oriented – Kitstart test kits provide know-how test methods and techniques for various applications.

Highly stable and accurate – Built on a granite base with <5 micron planarity, which provides the stability and accuracy crucial to highly reliable test results.

Slimscope and superscope – Slimscope for tests requires space besides the microscope (mmW test, etc.) and Superscope for high magnification requirements .

Cost-effective – The most cost effective system among the products of the same grade.

## Description

In order to acquire accurate and reliable test results in the cutting edge tests, one of the key factors is to use a probe station system with ultra mechanical accuracy and stability.

HAPS is built on a granite base with less than 5 micron planarity. This design not only assures the high planarity in X-Y motion but also provides a rigid and stable platform for high accuracy tests. To achieve positioning accuracy, we use precise micrometer heads to drive spring loaded X-Y axes. With an air bearing X-Y stage, user will be able to move the X-Y in coarse positioning

smoothly and quickly, thus greatly reducing set up time and improving test efficiency. One of the most common applications of HAPS is millimeter wave device characterization. The accuracy and stability act as an important role in protection of fragile and expensive mmW probes while producing reliable test results.

## **TWO Set Ups for HAPS**

### ***HAPS with a slimScope***

is generally set up for High-performance RF, multi-contact/mixed signal probing, Single-ended broadband/mmWave, THz, source/load pull, RF noise probing. All these measurements requires the system to be ultra accurate and stable fo ensure reliable measurement output. SlimScope and Superscope is interchangeable.



### ***HAPS with a Superscope***

is generally set up for probing on tiny geometric structures of wafer level reliability tests, failure analysis, high power tests, etc. HAPS' intuitive manipulation enables users focus more on their measurements rather than manipulation. SlimScope and Superscope is interchangeable.

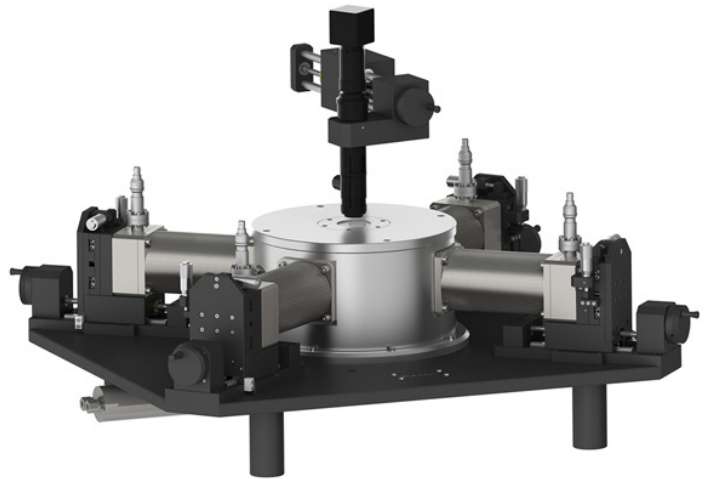


## **Ordering Information**

- |                          |  |
|--------------------------|--|
| HAPS-SlimScope-5X        | Probe Station with AccuStage, SlimScope(5X objective).<br>Other magnifications available upon request.           |
| HAPS-SuperScope-2/10/20X | Probe Station with AccuStage Superscope(2X, 10X, 20X objective).<br>Other magnifications available upon request. |

# CryoPS

Dedicated probe station systems that provide precisely-controlled environments.



## Application

DC, RF, mmW Tests;  
MEMS, NEMS, Optoelectronics Tests;  
Super conductor Tests.  
,etc.

## Features

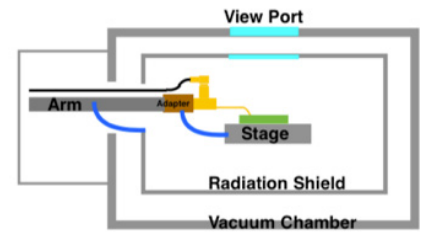
Precisely controlled environment – High vacuum chamber with 4.4K-675K stage temperature range.  
Upgradable – Upgradable in positioners, temperature range, vacuum range, and optical access.  
Affordable – Using liquid cryogen, very competitive price among the products of the same grade.  
Compact Footprint – Perfect for academic and laboratory research settings with limited space.

## Description

KeyFactor's CryoPS offers a cryogenic environment with  $10^{-3}$  to  $10^{-6}$  mbar vacuum level. It meets the requirements for non-destructive measurement of the electrical properties of materials and early-stage electronic devices. Users can start with a standard system and upgrade to a higher level probe station with higher vacuum level and temperature range. Dedicated design is also available upon request. Typical applications include sampling IV and CV curves over a wide range of temperatures, measuring microwave and electro-optical responses, characterizing magneto-transport properties in variable magnetic fields, Hall-effect measurements to understand carrier mobility, and a variety of other material studies.

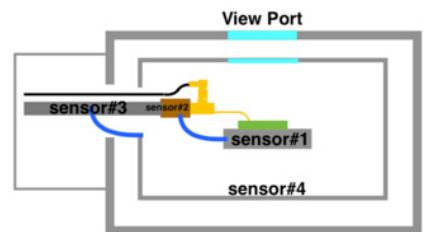
### The key factors to your DUT(sample device) temperature.

The temperature of the device under test (DUT) would be affected by heat radiation and transmission from the parts around it. If without comprehensive thermal anchoring to these parts, the real temperature of the DUT would be much higher than you see on the temperature controller. That is because the temperature sensor is always installed on the stage but not the DUT. To avoid erroneous results, we apply the innovative thermal anchoring technique to probes, arms and radiation shields.



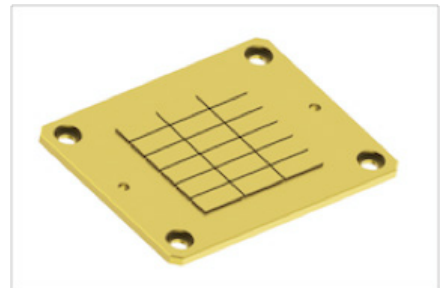
### Comprehensive temperature monitoring.

There are four temperature sensors in our system to provide you with a accurate thermal profile of the test environment. One sensor is installed on the sample stage and the others are installed on the radiation shields, probe arms, and probes separately.



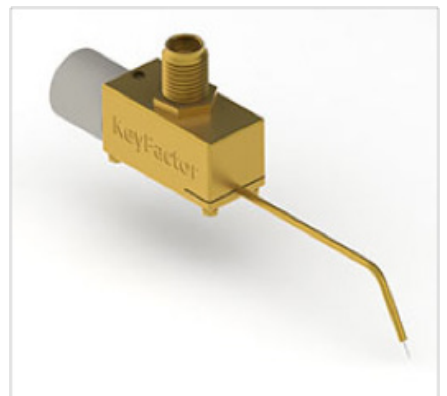
### Various sample holders.

The most common sample holder is a OFC holder grounded to the System chassis. It is used when no background signal transmission is needed on the DUT. We also provide coax and triax versions with low noise for high resolution signal measurement. All holders are Type II gold plated.



### High performance probes available.

FemtoProbe is compatible with CryoPS. This set up will provide guarded probe tips to triax source and measurement units. It significantly reduces system noise level and will enable you to measure signals down to 1 femtoamp resolution.



### Ordering Information

- |            |                           |
|------------|---------------------------|
| CryoPS-2in | 2in sample holder set up. |
| CryoPS-4in | 4in sample holder set up. |

# Tell Us

Your needs and we can  
customize for you.



---

## Description

Besides standard probing systems, we also customize dedicated systems, such as PCB, LCD , TPT board test probe station, laser cutting probe station, opto-electronic test systems, ect. Plase contact us and our expert will assist you in setting up your own systems.

## Chucks/Sample Holders

Chucks/sample holders for various applications: chucks with test port, RF test chucks, hot chucks, cryogenic sample holders.

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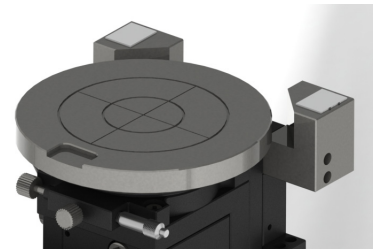
### TP Chuck

Diameter	2~12 inch
Material	Bronze
Coating	TYPE II Gold Plated
Sample Mounting	Vacuum
Test Port	BNC. Chuck is electrical isolated. Can be used for signal transmission.



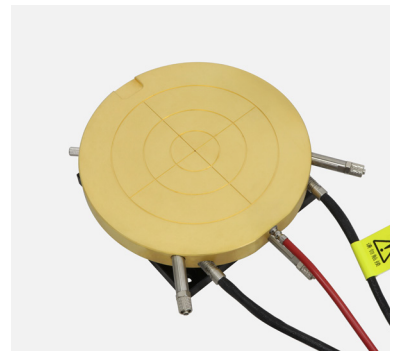
### RF Chuck/Auxiliary Chuck

Space	For 1 RF calibration substrate.
Material	304 Stainless Steel
Planarity	5 micron
CS Mounting	Vacuum
Quantity	2 PCS
Application	RF tests.



### Hot Chuck

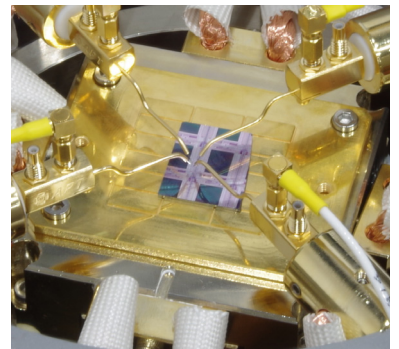
Diameter	4~12 inch
Material	Copper
Coating	TYPE II Gold Plated.
Temperature range	RT to 200 C, larger range available upon request
Sample Mounting	Vacuum
Application	Tests require precisely controlled temp.



\*Please refer to the technical specs for detail information.

### Cryogenic Sample Holder

Diameter	2~4 inch
Material	OFC
Coating	TYPE II Gold Plated.
Temperature range	4K to 475K
Test Port	Electrical isolated, can be connected to test instrument for signal transmission.
Application	CryoPS probe station sample holder





## Positioners/Micropositioners

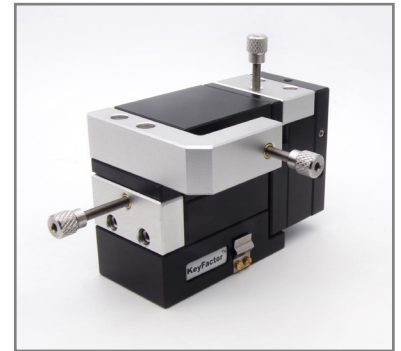
Positioners with accurate and stable probe placement are key factors to avoid erroneous measurement results. We offer positioners for various applications.

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### DTP100 Micropositioner

Accuracy	5 $\mu$ m
X-Y-Z Travel Range	12.5mm*12.5mm*12.5mm
TPI	100
Mounting	Magnetic (W/O On/Off function)
Footprint	106mm*80mm*70mm (W*D*H)
Application	Basic I-V/C-V probing

\*Available in right handed or left handed manipulation.



### DCP100 Micropositioner

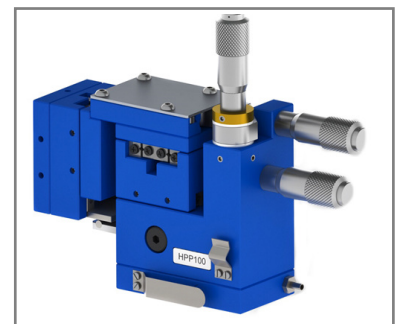
Accuracy	2 $\mu$ m
X-Y-Z Travel Range	12.5mm*12.5mm*12.5mm
TPI	100
Mounting	Magnetic (On/Off function)
Footprint	112mm*72(W*D)
Application	I-V/C-V, RF probing, Failure analysis

\*Available in right handed or left handed manipulation.



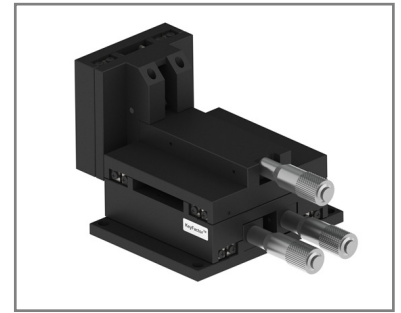
### HPP100 Micropositioner

Accuracy	0.5 $\mu$ m
X-Y-Z Travel Range	12.5mm*12.5mm*12.5mm
TPI	100
Mounting	Vacuum, option1 Magnetic (W On/Off function), option 2
Footprint	106mm*80mm*70mm (W*D*H)
Application	I-V/C-V submicron probing, Failure analysis



### RFP100 Micropositioner

Accuracy	3 $\mu$ m
X-Y-Z Travel Range	25mm*25mm*10mm
TPI	50
Mounting	Bolt down
Footprint	192mm*105mm*106mm (W*D*H)
Application	High-performance RF, multi-contact /mixed signal probing High-performance versatile wafer-level reliability probing Single-ended broadband/mmWave, THz, source/load pull, RF noise probing



### RFP100 Micropositioner

Accuracy	3 $\mu$ m
X-Y-Z Travel Range	25mm*25mm*10mm
TPI	50
Mounting	Bolt down
Footprint	255mm*192mm*155mm (W*D*H)
Application	High-performance RF, multi-contact /mixed signal probing High-performance versatile wafer-level reliability probing Single-ended broadband/mmWave, THz, source/load pull, RF noise probing.



## Probe holders, Probes and Adapters

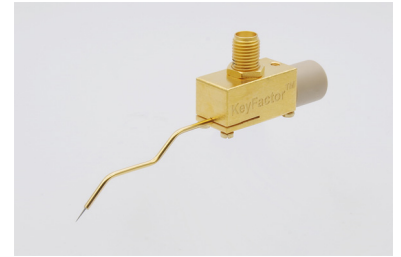
A wide variety of probing accessories for I-V/C-V measurements, pulsed I-V measurements, optimized C-V and LCR measurement, high voltage/high current measurement, high impedance active signal measurement RF/mmwave tests, etc.

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### FemtoProbe COAX Probe

Application	Ultra low noise I-V, pulsed I-V measurement
Current Leakage	<10fA
Cable	N.A.* See page 16 for cable assemblies.
Connector	SMA, female, gold plated
Breakdown voltage	500V
Adapters	Purchase Separately. FP-A100 or FP-A200.

\*Cable assemblies and adapters purchased separately.



### FemtoProbe Replacement Tips

Application	FemtoProbe replacement tips.
Tips Diameter	5µm, 10µm, 20µm
Probe bend	45 or 60 degree in one bend or 45 or 60 degree in dual bend



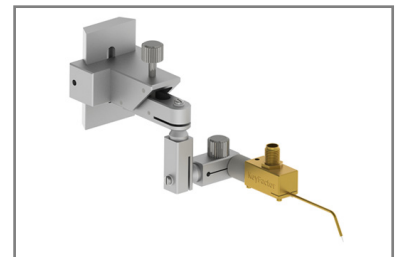
### FP-A100 Probe Adapter

Application	Femtoprobe and CPA-10 probe adapter to positioners.
Positioner compatibility	DTP100, DCP100, HPP100
Features	N.A.* See page 16 for cable assemblies.



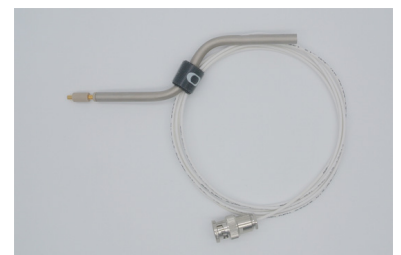
### FP-A200 Probe Adapter

Application	Femtoprobe and CPA-10 probe adapter to positioners.
Positioner compatibility	DTP100, DCP100, HPP100
Features	Pivoted heads for flexible probing.



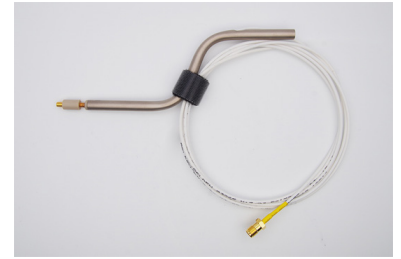
### S10-COAX-BNC Probe holder

Application	Optimized I-V test, C-V tests
Current Leakage	<10pA
Cable	2m Coax Cable (Available in different lengths)
Connector	BNC, male, silver (contact finish)
Breakdown voltage	500V



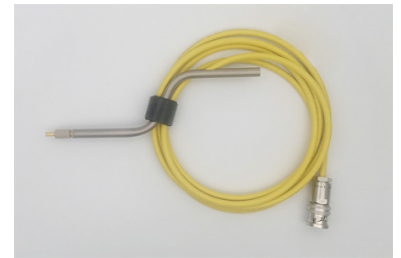
### S10-COAX-SMA Probe holder

Application	Ultra-fast I-V tests: pulsed I-V, transient I-V, and pulsed sourcing.
Current Leakage	<10pA
Cable	2m Coax Cable (Available in different lengths)
Connector	SMA, Jack/Plug, gold (contact finish)
Breakdown voltage	500V



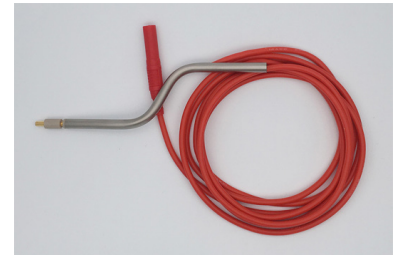
### S10-TRIAX Probe holder

Application	Optimized I-V test, C-V tests
Current Leakage	<100fA
Cable	2m TRIAX Cable (Available in different lengths)
Connector	Tiax, Jack/Plug, gold (contact finish)
Breakdown voltage	500V



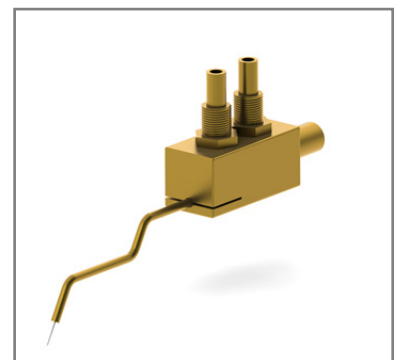
### S10-BA Probe holder

Application	Basic I-V test
Current Leakage	<10nA
Cable	2m flexible cable (Available in different lengths)
Connector	Banana, shrouded plug, nickel (contact finish)
Breakdown voltage	500V



### CPA-10 COAX Probe

Application	Excellent performance with LCR, Low noise I-V measurement
Current Leakage	<10fA
Residual Capacitance	<10fF (Tested by LCR)
Cable	N.A. See page 16 for cable assemblies.
Connector	SSMC, Plug, gold plated
Breakdown voltage	500V
Adapters	N.A.*



\* Cable assemblies and adapters purchased separately.

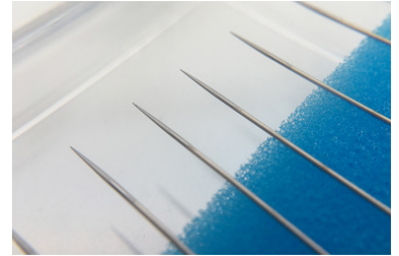
### CPA-10 Replacement Tips

Application	CPA-10 replacement tips.
Tips Diameter	5µm, 10µm, 20µm
Probe bend	45 or 60 degree in one bend or 45 or 60 degree in dual bend



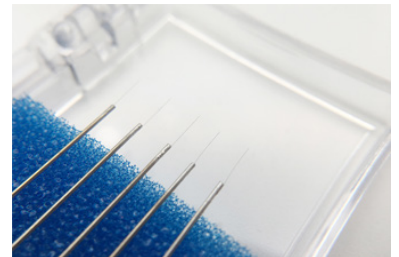
### Probe Holder Disposable Probe Tips

Application	S10 Series Probe holder replacement Tips
Material	Tungsten
Tip Diameter	5µm, 10µm, 20µm
Length	50mm
Finish	Nikel



### Probe Holder Disposable Probe Tips - Catwhisker

Application	S10 Series Probe holder replacement Tips Ideal for submicron or thin film probing.
Material	Tungsten-Tip, Copper-Shaft
Tip Diameter	0.2µm, 1µm, 3µm
Length	60mm
Finish	Nikel(Shaft)



### RF/mmW Probes, Multicontact Wedges

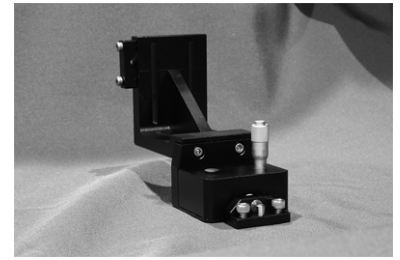
Application	High-performance RF, multi-contact /mixed signal probing High-performance versatile wafer-level reliability probing Single-ended broadband/mmWave, THz, source/load pull, RF noise probing.
Footprint	GS, SG, GSG, or differential
Pitch	Customized when ordered
Calibration Substrate	N.A. *
Adapters	N.A. *



\* Calibration Substrate and adapters are purchased separately.

### RFH-100 RF Probe to Positioner Adapter

Application	RF probes adapters to positioners
Positioner compatibility	DCP100, RFP100
Features	Rigid structures. 10° horizontal tilting range for probe tip planarity alignment to pads. Available in south, east, north and west.



### 12C High Impedance Active Probe (Picoprobes)

Application	High speed, high input impedance active probe for measuring the internal node voltage of integrated circuits.
Input Capacitance	Tungsten-Tip, Copper-Shaft
Input Resistance	0.2μm, 1μm, 3μm
Bandwidth	60mm
Linearity	Nikel(Shaft)
Voltage Range	0.2μm, 1μm, 3μm
Gain Accuracy	60mm
Signal Attenuation	(High Input impedance oscilloscope: 10 to1) (50 ohm input: 20 to 1)



### 12C Replacement Tips

Application	12C replacement probe tips.
Radius	<0.1μm, <1μm, <2μm, <3μm, <5μm





# Cable Assemblies

## **DC Cable Assemblies**

BNC, TRX, SMA, SSMC, Banana, Alligator clip coaxial/triaxial cable assemblies for I-V/C-V, pulsed I-V measurement.

## **High Power Tests**

SHV, MHV, coaxial/triaxial cable assemblies for high power tests and measurements.

## **RF, mmW**

Coaxial RF cable assemblies and waveguides.

Below is left blank intentionally.

## DC Cable Assemblies

### SMA to TRX Cable Assembly CA-SMA-TRIAX-MTM-1M /(2M/3M)

Application	Low noise I-V measurement FemtoProbe cable assembly For connection of FemtoProbe to ultra high resolution semiconductor characterization systems.
Current Leakage	<10fA
Cable	1, 2 or 3m TRIAX cable available
Connector	SMA, male, gold coating side1 Triax, male, gold (contact finish) side2
Breakdown voltage	500V



### SSMC to BNC Cable Assembly CA-SSMC-BNC-FTM-1M /(2M/3M)

Application	Low noise I-V measurement CPA-10 cable assembly For connection of CPA-10 to LCR or any other C-V measurement instrument.
Current Leakage	<10pA
Cable	1, 2 or 3m COAX cable available
Connector	SSMC, female, gold coating, side1 BNC, male, silver (contact finish) side2
Breakdown voltage	500V



### SSMC to SMA Cable Assembly CA-SSMC-SMA-MTF-1M /(2M/3M)

Application	Ultra-fast I-V tests: pulsed I-V, transient I-V, and pulsed sourcing.
Current Leakage	<10pA
Cable	1, 2 or 3m COAX cable available
Connector	SSMC, male, gold coating side1 SMA, female, silver (contact finish) side2
Breakdown voltage	500V



## DC Cable Assemblies

### SSMC to TRX Cable Assembly CA-SSMC-TRIAX-FTM-1M /(2M/3M)

Application	Low noise I-V measurement For connection of CPA-10 to ultra high resolution semiconductor characterization systems.
Current Leakage	<10fA
Cable	1, 2 or 3m TRIAX cable available
Connector	SSMC, female, gold coating side1 BNC, male, gold (contact finish) side2
Breakdown voltage	500V



### BNC to BNC Cable Assembly CA-BNC-BNC-MTM-1M /(2M/3M)

Application	Extended connection, in series. Low noise I-V measurement.
Current Leakage	<10pA
Cable	1, 2 or 3m COAX cable available
Connector	BNC, male, silver (contact finish) side1 BNC, male, silver (contact finish) side2
Breakdown voltage	500V



### BNC to TRX Cable Assembly CA-BNC-TRIAX-MTM-1M /(2M/3M)

Application	Extended connection, between series. Low noise I-V measurement.
Current Leakage	<10fA
Cable	1, 2 or 3m TRIAX cable available
Connector	BNC, male, silver (contact finish) side1 Triax, male, gold (contact finish) side2
Breakdown voltage	500V



### TRX to TRX Cable Assembly CA-TRIAX-TRIAX-MTM-1M /(2M/3M)

Application	Extended connection, in series. Low noise I-V measurement.
Current Leakage	<10fA
Cable	1, 2 or 3m TRIAX cable available
Connector	Triax, male, gold (contact finish) side1 Triax, male, gold (contact finish) side2
Breakdown voltage	500V



## DC Cable Assemblies

### BNC to Alligator Clip Cable Assembly CA-BNC-AC-MTM-1M /(2M/3M)

Application	Adapts BNC to alligator clip end
Current Leakage	<10nA
Cable	1, 2 or 3m COAX cable available
Connector	BNC, male, silver (contact finish) side1 Alligator clip(2 each), gold (contact finish) side2
Breakdown voltage	500V



### TRX to Alligator Clip Cable Assembly CA-TRX-AC-MTM-1M /(2M/3M)

Application	Adapts TRX connector to alligator clip end
Current Leakage	<10nA
Cable	1, 2 or 3m TRIAX cable available
Connector	Triax, male, gold (contact finish) side1 Alligator clip(3 each), male, nickel (contact finish) side2
Breakdown voltage	500V



### BNC to Banana Plug Cable Assembly CA-BNC-BA-MTM-1M /(2M/3M)

Application	Adapts BNC to banana plug end
Current Leakage	<10nA
Cable	1, 2 or 3m COAX cable available
Connector	BNC, male, silver (contact finish) side1 Banana plug (2 each), nickel (contact finish) side2
Breakdown voltage	500V



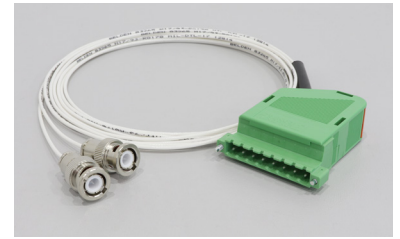
### TRX to Banana Plug Cable Assembly CA-TRX-BA-MTM-1M /(2M/3M)

Application	Adapts TRX connector to banana plug end
Current Leakage	<10nA
Cable	1, 2 or 3m TRIAX cable available
Connector	Triax, male, gold (contact finish) side1 Banana plug (3 each), nickel (contact finish) side2
Breakdown voltage	500V



**Phoenix connector to BNC CA-BNC-2612B-MTM-2M**

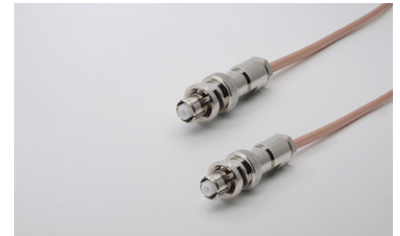
Application	Keithley 2612B Cable Assembly
Current Leakage	<10pA
Cable	COAX cable, 2 meters
Connector	BNC, male, silver(contact finish) side1 Phoenix connector, side2
Breakdown voltage	500V



**High Current, High Voltage Cable Assemblies**

**SHV to SHV Cable Assembly CA-SHV-SHV-FTF-1M /(2M/3M)**

Application	Extended connection for SHV connector. High voltage, high current tests.
Maximum current	120mA
Maximum voltage	5000V
Cable	1, 2 or 3m COAX cable available
Connector	SHV, male, gold (contact finish) side1 SHV, male, gold (contact finish) side2
Breakdown voltage	>5000V



**RF, mmW cables, waveguides**

**RF, mmW cables, waveguides**

Application	High-performance RF, multi-contact/mixed signal measurement, Single-ended broadband/mmWave, THz, source/load pull, RF noise measurement
Cable*	Semi rigid coax cable or waveguides
Connector	Vary from frequency bands



\*Please contact us for detail information of cables and connectors.

## Adapters (Connectors)

In/between series adapters for DC, RF, mmW and high power extendtions and feedthrougs.

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### **BNC feedthrough Adapter ADP-BNC-BNC-FTF**

Application	In series, extended coax cable connection or shield enclosure feedthroughs.
Current Leakage	<10pA
Gender	Female side 1, Female side 2
Coating	Nikel
Contact Finish	Silver
Mounting	Bulkhead
Breakdown voltage	500V



### **TRX feedthrough Adapter ADP-TRIAX-TRIAX-FTF**

Application	In series, extended triax cable connection or shield enclosure feedthroughs.
Current Leakage	<10fA
Gender	Female side 1, Female side 2
Coating	Nikel
Contact Finish	Gold
Mounting	Bulkhead
Breakdown voltage	500V



### **BNC Tee Adapter ADP-BNCT-MTFF**

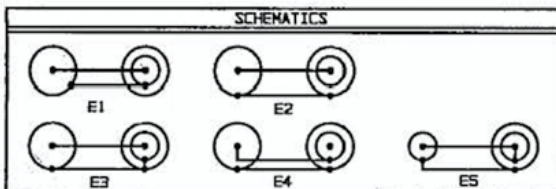
Application	Two BNC to one BNC connection. Often used with CV module.
Current Leakage	<10fA
Gender	Male side 1, Female side 2&3
Coating	Nikel
Contact Finish	Silver
Mounting	Bulkhead
Breakdown voltage	500V



### TRX to BNC Adapter ADP-TRIAX-BNC-FTF

Application	Between series, BNC to triax.
Current Leakage	N.A.
Gender	Female side 1, Female side 2
Coating	Nikel
Contact Finish	Gold
Mounting	Bulkhead
Breakdown voltage	500V
Schematics	E1/ E2/ E3/ E4/ E5, see picture below

\*Male gender available upon request.



### BNC feedthrough Adapter ADP-BNC-BNC-FTF

Application	In series, extended coax connections or feedthroughs for high voltage I-V measurement.
Current Leakage	N.A.
Gender	Female side 1, Female side 2
Coating	Nikel
Contact Finish	Silver
Mounting	Bulkhead
Breakdown voltage	>5000V



### Coax to Waveguide Adapter

Application	Between series, connects coax connectors to waveguide connectors. Eg. 1.0mm to WR-12
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\*Please contact us for detail information.





## Light Tight, EMI Shield Enclosure

Shield enclosures help to reduce/eliminate interferences from light and EMF for low noise or light tight tests and measurements.

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# EMIShield

Ideal for light tight and EMI shielded measurement.



## Application

Light tight and EMI shielding.

## Features

Light tight – Seamless design provides a light environment for measurement.

EMI Shielding – Grounded to instrument chassis to shield systems from EMI interference.

Easy feedthroughs – Two feedthrough panels on each side, very convenient to install bulkhead connectors.

Spring loaded door stand – Effortless and low vibration level when opening/closing the front door.

Interlock – Interlock version available for high current and high voltage tests.

VIT compatible – Can be integrated to VIT Frames, vibration free to DUT.

## Physical Dimensions

Current Leakage	800mm(W)*800mm(D)*930mm(H) 1200mm(W)*900 (D)*930mm(H)
Cable	100kg 140kg

\* Specifications are subject to change without notice.

## Vibration Isolation Frames

Vibration isolation tables (VIT) provide a highly stable platform for probe station systems. They help to keep your systems stable and minimize the probe drifting.

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### Table Top Compact Vibration Isolation Table

Size	24in*24in (W*D)
Natural Frequency	Horizontal 3.6Hz, Vertical 3.2Hz
Damping	Pneumatic
Maximum load	80kg
Compressed air	Yes
Auto leveling	Yes
Height	2in
Weight	20kg

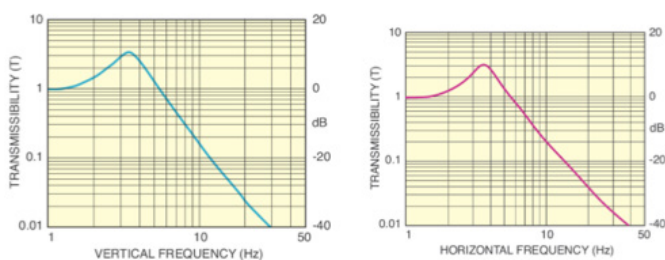


### Table Frame Vibration Isolation Table

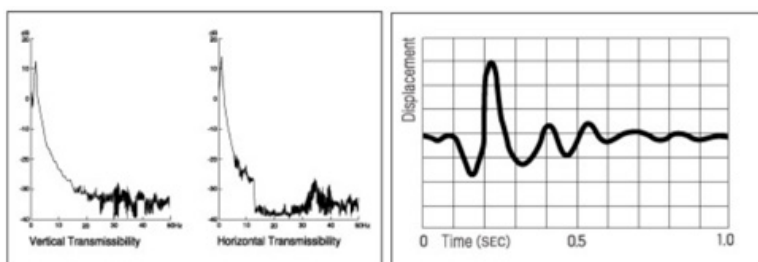
Size	24in*24in (W*D)
Natural Frequency	Horizontal 3.6Hz, Vertical 3.2Hz
Damping	Pneumatic
Maximum load	80kg
Compressed air	Yes
Auto leveling	Yes
Height	2in
Weight	20kg



Frequency and transmissibility - Table Top Compact Vibration Isolation Table



Frequency and transmissibility - Table Frame Vibration Isolation Table



# Microscopes, Objectives and Cameras

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## Microscopes

### Stereo Microscope

Magnification	15X~100X
Resolution	2micron
Eyepieces	20X
Zoom Range	0.75X~5X
Working Distance	110mm
Focus travel range	50mm
Camera interfacet	C-Mount



### SlimScope

Magnification	Vary from CCD and Monitor sizes
Resolution	N.A.
Eyepieces	N.A.
Zoom Range	0.58X~7X
Objectives	1X, 2X, 5X, 10X, 20X, 50X, 100X available upon request
Objectives slot	1slot for quick change
Working distance	89mm (1X objective)
Focus travel range	50mm/10mm coax focus ranget
Camera interface	C-Mount



### SuperScope

Magnification	20X~2000X
Resolution	N.A.
Eyepieces	10X
Zoom Range	1X~2X
Objectives	2X, 5X, 10X, 20X, 50X, 100X (available upon request, turret for maximum 4 pcs of objectives)
Objectives Turret	4
Working distance	Vary from objectives
Focus travel range	50mm coax focus range (4mm/rev coarse, 0.1mm/rev fine)
Camera interface	C-Mount
Laser interface	Optional



\*Objectives are purchased separately.

## Objectives



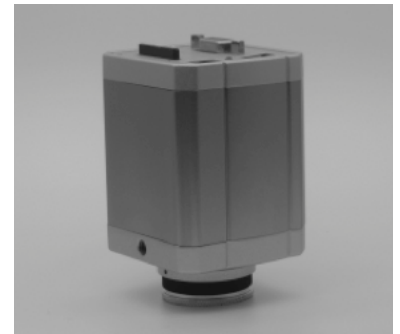
### Objective lens, compatible with SlimScope and Superscope.

Model #	Description	Application	Mag.	N.A.	W.D.	Resolution	Focal Depth
OBL-2X	M Plan APO 2X	BF, LWD	2X	0.055	34.6mm	5 $\mu$ m	91 $\mu$ m
OBL-5X	M Plan APO 5X	BF, LWD	5X	0.13	45mm	2 $\mu$ m	14 $\mu$ m
OBL-10X	M Plan APO 10X	BF, LWD	10X	0.28	34mm	1 $\mu$ m	3.5 $\mu$ m
OBL-20X	M Plan APO 20X	BF, LWD	20X	0.42	31mm	1 $\mu$ m	3.3 $\mu$ m
OBL-50X	M Plan APO 50X	BF, LWD	50X	0.42	45mm	0.7 $\mu$ m	1.6 $\mu$ m
OBL-100X	M Plan APO 100X	BF, LWD	100X	0.55	12.5mm	0.5 $\mu$ m	1.0 $\mu$ m
OBL-1X-NIR	M Plan APO NIR 1X	BF, Laser	1X	0.03	12mm	22.4 $\mu$ m	611 $\mu$ m
OBL-2.5X-NIR	M Plan APO NIR 2.5X	BF, Laser	2.5X	0.1	28mm	6.7 $\mu$ m	55 $\mu$ m
OBL-5X-NIR	M Plan APO NIR 5X	BF, Laser	5X	0.13	45mm	2 $\mu$ m	14 $\mu$ m
OBL-10X-NIR	M Plan APO NIR 10X	BF, Laser	10X	0.28	34mm	1 $\mu$ m	3.5 $\mu$ m
OBL-20X-NIR	M Plan APO NIR 20X	BF, Laser	20X	0.5	12mm	0.5 $\mu$ m	2.2 $\mu$ m
OBL-50X-NIR	M Plan APO NIR 50X	BF, Laser	50X	0.6	10mm	0.6 $\mu$ m	1.5 $\mu$ m
OBL-100X-NIR	M Plan APO NIR 100X	BF, Laser	100	0.75	10mm	0.75 $\mu$ m	0.9 $\mu$ m
OBL-20X-NUV	M Plan APO NUV 20X	BF, Laser, NUV	20X	0.4	17mm	0.69 $\mu$ m	1.72 $\mu$ m
OBL-50X-NUV	M Plan APO NUV 100X	BF, Laser, NUV	50X	0.7	14.8mm	0.64 $\mu$ m	1.49 $\mu$ m

## Cameras and Monitors

### CAM-200MP-VGA

Sensor	1/2.86 in
Resolution	1920*1080 pixel
Frame rate	30 fps
Digital Zoom	1X~10X
Storage	SD card
Software	Snapping, recording
Video interface	VAG
Camera interface	C-Mount
Power	DC 12V, 1A



### CAM-200MP-HDMI

Sensor	1/2.86 in
Resolution	1920*1080 pixel
Frame rate	60 fps
Digital Zoom	1X~10X
Storage	SD card
Software	Snapping, recording, and measuring
Video interface	HDMI
Camera interface	C-Mount
Power	DC 12V, 1A



### CAM-W231S2

Sensor	1/2.86 in
Resolution	540TVL
Video interface	BNC
Camera interface	CS Mount
Power	DC 12V, 1A



### CAM-Monitor

TFT screen	23 in (larger available)
Video interface	VGA/HDMI/BNC
Power	110V/220V ±10%





# Vacuum Pumps and Air Compressors

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## Vacuum Pumps

### VP-125

Application	For vacuum fixation of DUT, chucks, and micropositioners.
Vacuum level	-33kPa(-250mmHg)
Volume	7L/min
Inlet/Outlet	Compatible with 6mm~8mm lines, OD
Power	110V/220V ±10%
Weight	0.7kg
Dimensions	92mm*58mm*90mm(W*D*H)



### VP-D16C

Application	Used with CryoPS to pump down to basic vacuum level.
Vacuum level	$4 \times 10^{-4}$ mbar
Volume	17m <sup>3</sup> /h
Inlet/Outlet	KF25
Power	110V/220V ±10%



## Air Compressors

### AC-45DB

Application	Compressed air source
Volume	80L/min
Pressure (max)	8bar/120psi
Container Volume	30L
Working Noise	45dB
Weight	50kg
Dimensions	600mm*430mm*650mm(W*D*H)
Power	110V/220V ±10%



### AC-35DB

Application	Compressed air source
Volume	17L/min
Pressure (max)	8bar/120psi
Container Volume	4L
Working Noise	35dB
Weight	18kg
Dimensions	382mm*300mm*334mm(W*D*H)
Power	110V/220V ±10%



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