



EB-6V mmW Probe Station

Optimized mmW Probe Station for
precise integration with
VDI, OML, Keysight, R&S Millimeter-Wave
Modules

The EB-6V is a market proven solution for mmW research. The following features are available to the system:

Features

- Customized positioners to reduce waveguides between millimeter-wave modules and probe head
- Firm and stable positioners for extenders and tuners of all sizes
- Integrated dial gauge determining contact scratch on probes
- Precise integration allowing direct link of probes
- North and south bridge for additional DC and RF micropositioners
- Coaxial style high precision stage
- Back-lash free movement
- Micropositioner Standby Dock

Applications

- High Performance RF
- Single Broadband Probing
- Differential mm-Wave
- Basic DC (IV/CV)

Accessories

- Hot Chuck with Auxiliary Chuck with Temperature Controller
- Vibration Free Table
- Shielding Box

EB-6V PROBE STATION

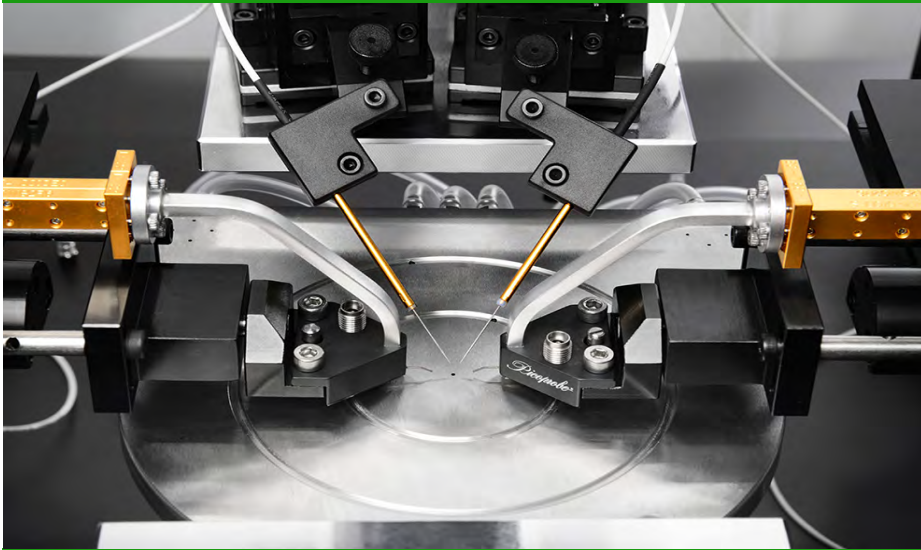
Your Partner in Probing Solutions

Station Specifications

| | |
|--------------------------------|--|
| Station Footprint | 760 mm W x 660mm D |
| Station Height | 450 mm (to Platen)/700 mm (to Microscope) |
| Station Weight | 80kg |
| Platen Material | Hard Chrome Plated Steel |
| Platen Dimension | 120 mm x 180 mm (North and South) |
| Platen Capacity | 4 RF and 2 DC or 2 RF and 4 DC |
| Positioner Mount | Magnetic ON/OFF Switch |
| No. of Vacuum Switches | 4 |
| Chuck Material | Stainless Steel |
| Chuck Stage Type | Coaxial |
| Chuck Travel Range | 6" x 6" |
| Chuck Fine Resolution | 1 μ m |
| Chuck Theta Coarse Travel | 360° |
| Chuck Theta Fine Resolution | 0.01° |
| Chuck Z-Motion Range | 4 mm |
| Chuck Z-Fine Resolution | 1 μ m |
| Coaxial Chuck Movement | Bevelled Gear and Rack 0.8 mm Pitch |
| Chuck Size | 6" (150 mm) |
| Chuck Planarity | 3 μ m |
| Chuck Rigidity | 15 μ m / 10 N @ edge |
| Chuck Vacuum Grooves | Center, 1.5", 3.5", 7" (Individually Controlled) |
| Chuck Bias Capacity | Up to 2 kV |
| Chuck Isolation | 5 G Ω |
| DUT Size Range | 2 mm - 150 mm |
| Microscope Stage Type | High Precision Linear Stage |
| Microscope Stage Resolution | 1 μ m |
| Microscope Stage Travel Range | 2" x 2" |
| Microscope Z-Lift(Optional) | 6 mm (Pneumatic) |
| Microscope Zoom Range | 1.4x - 9x |
| Microscope Eye Piece | 30x |
| Microscope Trinocular Port | C-Mount, 2x Adapter |
| Microscope Magnification Range | 42x-270x |

EB-6V PROBE STATION

mmW Micropositioner Features



EB-KRF

Linear Resolution: 0.5 μm

Angular Resolution: 0.0005°

Travel Range: Linear 50 mm X-Y,
25 mm Z, Angular $\pm 5^\circ$

Dimensions:

290 mm W x 140 mm D x 130 mm H

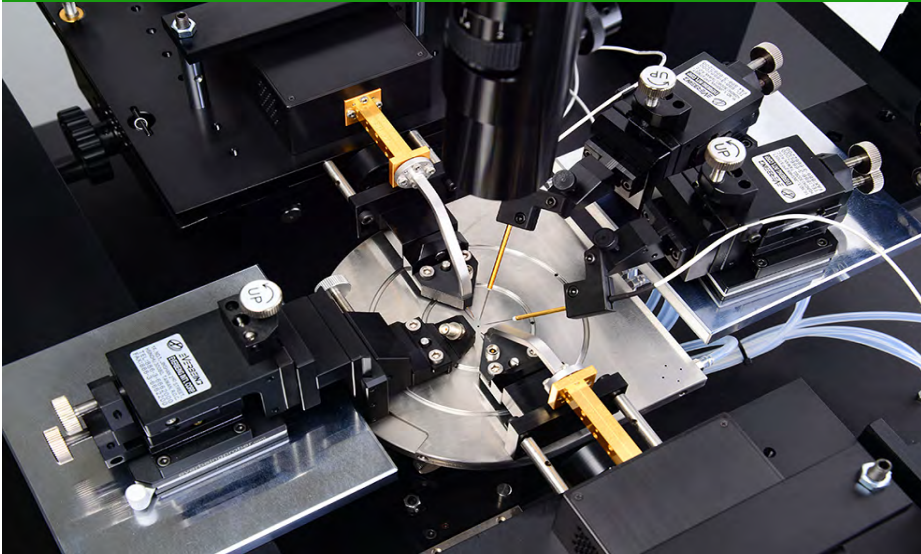
Weight: 6000 g

Extender Compability: VDI, OML,
Keysight, R&S, and other similar sized
extenders

Stiffness: 150 Kgf

Screw Type: 3/8" Stainless Steel lead
screw

Probing Depth Indicator: 0.5 μm



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Micropositioner Options

All micropositioners offer X-Y-Z linear-motion travel with no backlash with mounting options including magnet, vacuum or magnet switch



EB-050

Resolution: 0.8 μm

Screw Resolution: 212 μm

Travel Range: Linear 12 mm X-Y-Z

Dimensions: 52 mm W x 96 mm D x 76 mm H

Weight: 550 g

Use For: DC/RF Capable



EB-700

Resolution: 2 μm

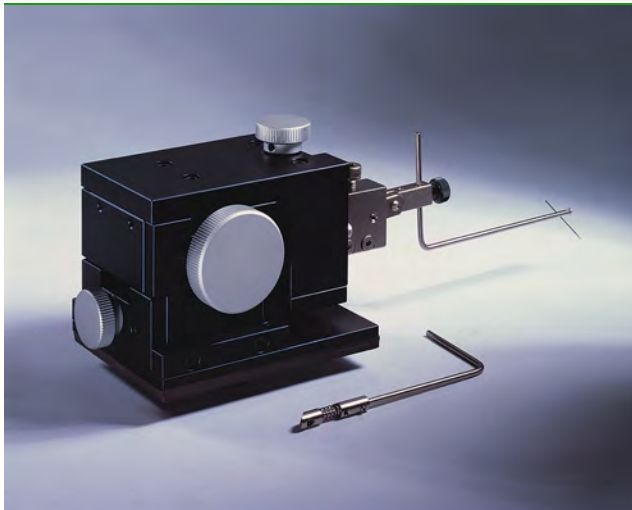
Screw Resolution: 630 μm

Travel Range: Linear 12 mm X-Y-Z

Dimensions: 38 mm W x 62 mm D x 45 mm H

Weight: 200 g

Used For: DC Only



EB-005

Resolution: 0.3 μm

Screw Resolution: 125 μm

Travel Range: Linear 12 mm X-Y-Z

Dimensions: 90 mm W x 130 mm D x 90 mm H

Weight: 1000 g

Used For: DC/RF Capable

EB-6V PROBE STATION

Vibration Free Table Option (Recommended)



VFT-4836

Dimension: 48" W x 36" D x 36" H

Vertical Natural Frequency: 1.5 Hz

Isolation Efficiency: @ 5 Hz 85%

Horizontal Natural Frequency: 1.2 Hz

Isolation Efficiency: @ 5 Hz 91%

Air Requirement: 80 psi

Net Load: 200 kg

Material: Stainless Steel TableTop