

# EVERBEING INT'L CORP.

Your Partner in Probing Solutions



## 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

Distribution in the UK & Ireland



**Lambda Photometrics Limited**  
Lambda House Batford Mill  
Harpenden Herts AL5 5BZ  
United Kingdom  
E: [info@lambdaphoto.co.uk](mailto:info@lambdaphoto.co.uk)  
W: [www.lambdaphoto.co.uk](http://www.lambdaphoto.co.uk)  
T: +44 (0)1582 764334  
F: +44 (0)1582 712084

# EB-6V PROBE STATION

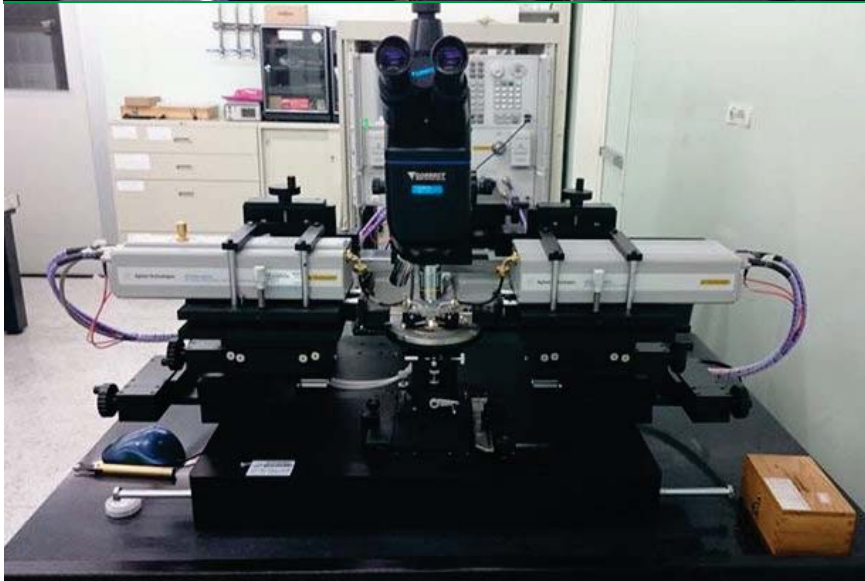
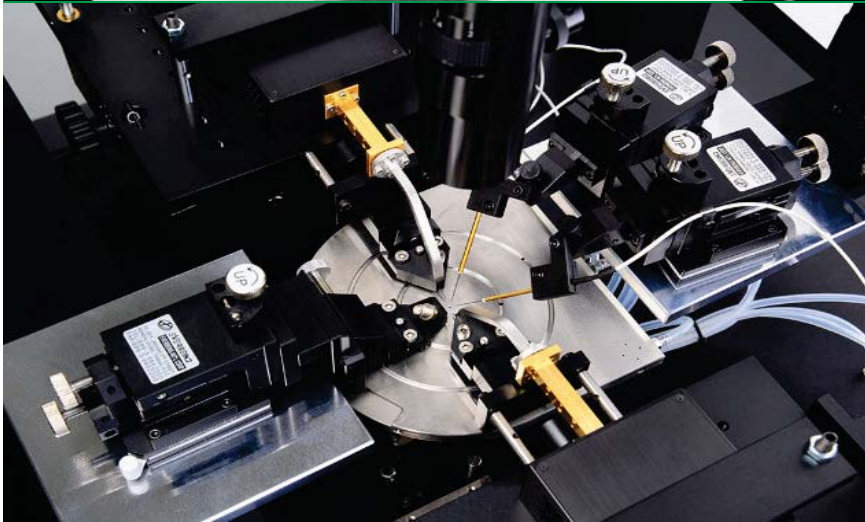
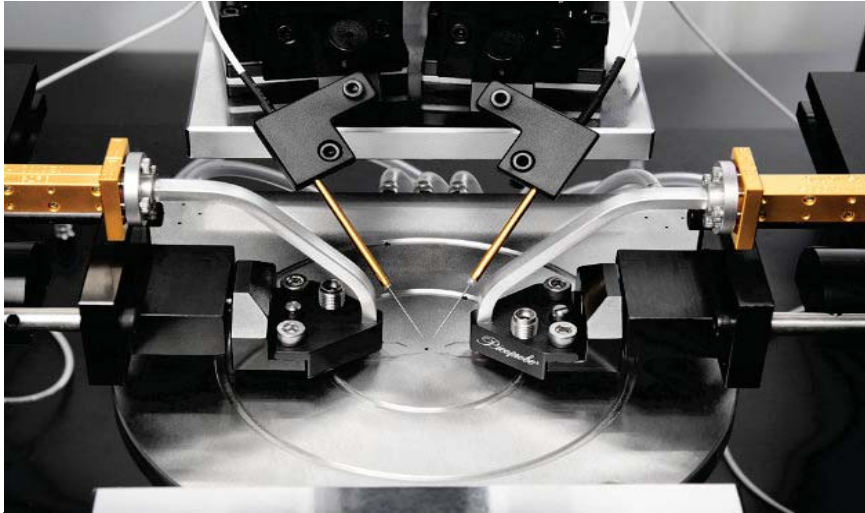
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### Station Specifications

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 $\mu$ m
Chuck Theta Coarse Travel	360°
Chuck Theta Fine Resolution	0.01°
Chuck Z-Motion Range	4 mm
Chuck Z-Fine Resolution	1 $\mu$ m
Coaxial Chuck Movement	Bevelled Gear and Rack 0.8 mm Pitch
Chuck Size	6" (150 mm)
Chuck Planarity	3 $\mu$ m
Chuck Rigidity	15 $\mu$ 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 $\Omega$
DUT Size Range	2 mm - 150 mm
Microscope Stage Type	High Precision Linear Stage
Microscope Stage Resolution	1 $\mu$ 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

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## mmW Micropositioner Features



### EB-KRF

<b>Linear Resolution:</b>	0.5 $\mu\text{m}$
<b>Angular Resolution:</b>	0.0005 $^\circ$
<b>Travel Range:</b>	X : $\pm 25$ mm Y : $\pm 25$ mm Z : $\pm 12.5$ mm $\theta$ : $\pm 5$ mm
<b>Mount Type:</b>	Screw Bolt to Base
<b>Dimensions:</b>	290 mm W x 140 mm D x 130 mm H
<b>Weight</b>	6 kg
<b>Compatibility:</b>	VDI, OML, Keysight, R&S
<b>Stiffness:</b>	150 kgF
<b>Screw Type:</b>	3/8" Stainless Steel Lead Screw
<b>Probe Depth Gauge:</b>	0.5 $\mu\text{m}$

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## Micropositioner Options

The Everbeing range of micropositioners offer X-Y-Z linear-motion travel with zero backlash with mounting options including vacuum or magnet on/off



### EB-050

<b>Resolution:</b>	0.8 $\mu\text{m}$
<b>Screw Resolution:</b>	317 $\mu\text{m}$
<b>Travel Range:</b>	12 mm x 12mm x 12mm
<b>Dimensions:</b>	52 mm x 96 mm x 76 mm
<b>Weight:</b>	550 g
<b>Application:</b>	DC, Kelvin, RF
<b>Mount Type:</b>	Magnet, Vacuum, Magnet ON/OFF



### EB-005

<b>Resolution:</b>	0.7 $\mu\text{m}$ / 0.3 $\mu\text{m}$
<b>Screw Resolution:</b>	253 $\mu\text{m}$ / 125 $\mu\text{m}$
<b>Travel Range:</b>	12 mm x 12mm x 12mm
<b>Dimensions:</b>	90 mm x 130 mm x 90 mm
<b>Weight:</b>	1000 g
<b>Application:</b>	DC, Kelvin, RF
<b>Mount Type:</b>	Magnet, Vacuum, Magnet ON/OFF



### EB-KRF

<b>Resolution:</b>	1 $\mu\text{m}$
<b>Screw Resolution:</b>	1028 $\mu\text{m}$
<b>Travel Range:</b>	50 mm x 50mm x 50mm
<b>Dimensions:</b>	400 mm x 270 mm x 340 mm
<b>Weight:</b>	6500 g
<b>Application:</b>	DC, RF, mmW
<b>Mount Type:</b>	Screw to Station Base, Optical Table

# EB-6V PROBE STATION

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## Vibration Free Table Option (Recommended)

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### 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

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W: [www.lambdaphoto.co.uk](http://www.lambdaphoto.co.uk)  
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