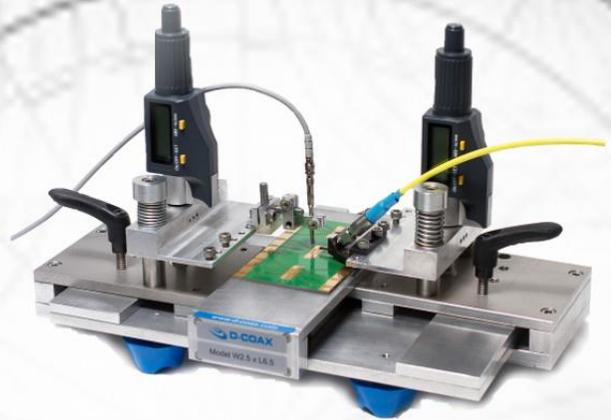


## W2.5 x L6.5 Mini Probe Station



### Data Sheet

The W2.5 x L6.5 mini probe station is a manual probe station designed for a versatile and comfortable operation on up to 2.5" wafers or 2.5" x 6.5" printed circuit board assemblies.

This mini probe station is affordable and offers a flexible design with portability in mind. It is light weight and can be transferred in the custom transport case (sold separately) to wherever you need to make your measurements - laboratory, office, "in the field", etc. With the size of a page of paper, the probe station fits easily in front of equipment without obstructing it. If needed, use a microscope for more accurate probe placement. The microscope, on its own separate stand, can be brought from the side not to block your test equipment. The X – Y positioning is free floating which allows for quick positioning at the angle you need. The Z positioning is via a digital readout in micrometers or inches for repeatable probe "touch-downs". You can sit or stand while using this unit due to the very low table to chuck height.

### Features/ Benefits

#### Flexibility

Ideal for a wide range of applications such as wafer test or PCB test for mm-Wave, Microwave, RF or Automotive applications

Can be used for mid-bus probing, differential probing, single ended probing, and hand-held (with probe holder) probing

The probe station can be customized for specific tests, for example, multi-pin connector holder, PCBAs, probe risers, etc.

Multiple probe mounting positions (9 mounting holes on each probe holder) allows more freedom for probe deployment or multiple probe deployment and additional accessories

Vacuum chuck

Variety of accessories are available such as wafer probes, TDR probes and probe holders

## Features/ Benefits (continued)

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Ease of Use	Fully Portable
	Simple design for straight-forward-use
	Small footprint, low profile
	Allows placement very close to the instrumentation

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Stability	Solid station frame
	X - Y probe holder locks
	Vibration Isolation feet

## Mechanical Performance

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### Probe Positioner

Travel	Left Positioner: X direction 1.29 inches, Y direction 8.5 inches*
Travel	Right Positioner: X direction 1.29 inches, Y direction 8.5 inches*
X – Y resolution	Depends on the microscope, the probe positioners are infinitely adjustable
Z height adjustment range	0.95 inches**
Angle Range	90+/-48 deg

\*refer to Drawing section, Drawing 1

\*\*refer to Drawing section, Drawing 2

## Physical Dimensions

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### Probe Station

Dimensions with both positioners out	X=13.5 by Y=7.5 by Z=8
Dimensions with both positioners in	X=11.5 by Y=7.5 by Z=8
Weight	6.5 lb.

## Physical Dimensions (continued)

### Chuck

Area	2.5 x 6.5 inches
Material	Aluminum
DUT size supported	Wafers, shards or circuit boards up to 2.5 x 6.5 inches
Vacuum location	Chuck center, 4 holes, square pattern ***
Vacuum Ring Diameter	0.25 inch ring minimum, effective up to 2.5 inch diameter
Vacuum Actuation	Mechanical valve (not supplied)
Chuck surface	Planar smooth surface
Surface planarity	+/- 0.002 inches
Rigidity	Fixed

\*\*\*refer to Drawing section, Drawing 3

### Facility Requirements

Vacuum	15 mbar min for smooth DUT
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### Available Accessories

Transport Case	D-COAX, 140-00102-00, transport case for W2.5 x L6.5 mini probe station
Vacuum Pump	Gast, P/N DOA-P701-AA, 115 Volts, 60 Hz, single phase, vacuum up to 29 in. Hg (31 mbar)
Vacuum Bleed Valve	Pneumadyne, C040501, exhausting 3-way vacuum valve
Pneumatic Fitting	edraulicsDirect, INB103-104-020, pneumatic fitting, quick disconnect, ¼ inch
Tubing	AutomationDirect, PU14BLU100, polyurethane pneumatic tubing
Microscope	Olympus, P/N SZ-6145, 6.7X – 45X magnification, higher magnification P/N's available
Microscope Stand	Spot Imaging Solutions, P/N SMS16A, Boom Stand with 15.75", Vertical Post & Weighted Base
Wafer Probe Adapter	D-COAX, P/N 600-00038-00, 90 degree wafer probe adapter/converter
Probe Holder	D-COAX, P/N 600-00045-00, adjustable hand held probe holder
Omni Probe	D-COAX, P/N 600-00051-00, Pencil Style 44 GHz High Frequency Coaxial PCB Probe, 1mm pitch
OmniJet Probe	D-COAX, P/N 600-00178-00, Customary Mount 44 GHz High Frequency Coaxial PCB, 1mm pitch
65 GHz flexible cable	D-COAX, P/N 600-00030-00, 12 inch long or custom length
40 GHz flexible cable	D-COAX, P/N 600-00029-00, 12 inch long or custom length
65 GHz Flexible Pair	D-COAX, P/N 600-00172-00, 12 inch long, Skew Matched, Phase Stable Cable Pair****
40 GHz Flexible Pair	D-COAX, P/N 600-00169-00, 12 inch long, Skew Matched, Phase Stable Cable Pair****

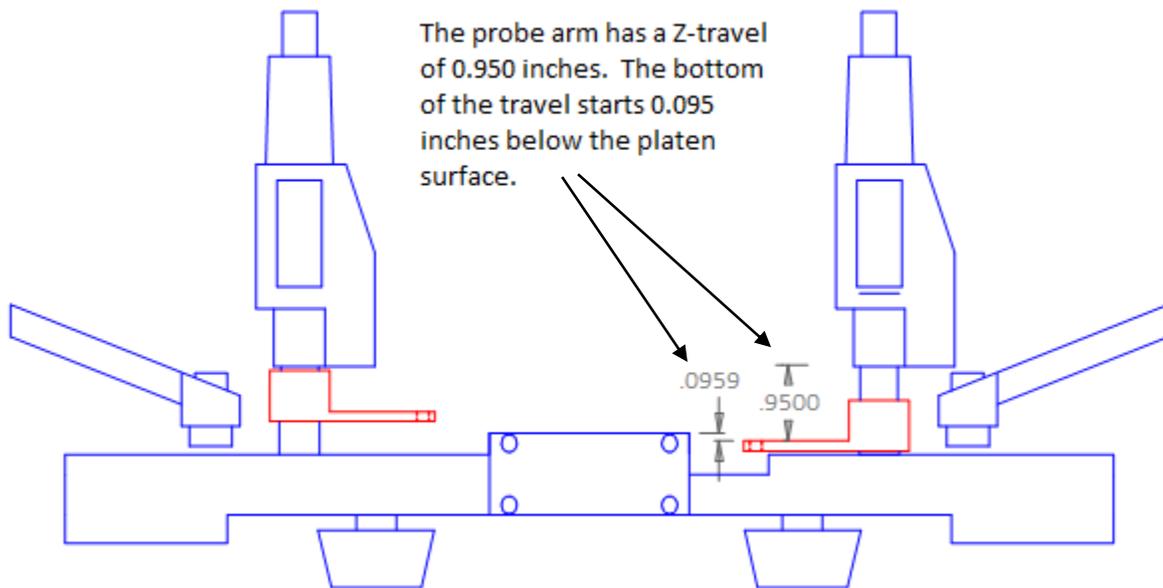
\*\*\*\*Flexible Pairs are also available in 24 inch and 28 inch lengths, see website for part numbers. Custom length available too.



## Drawings (continued)

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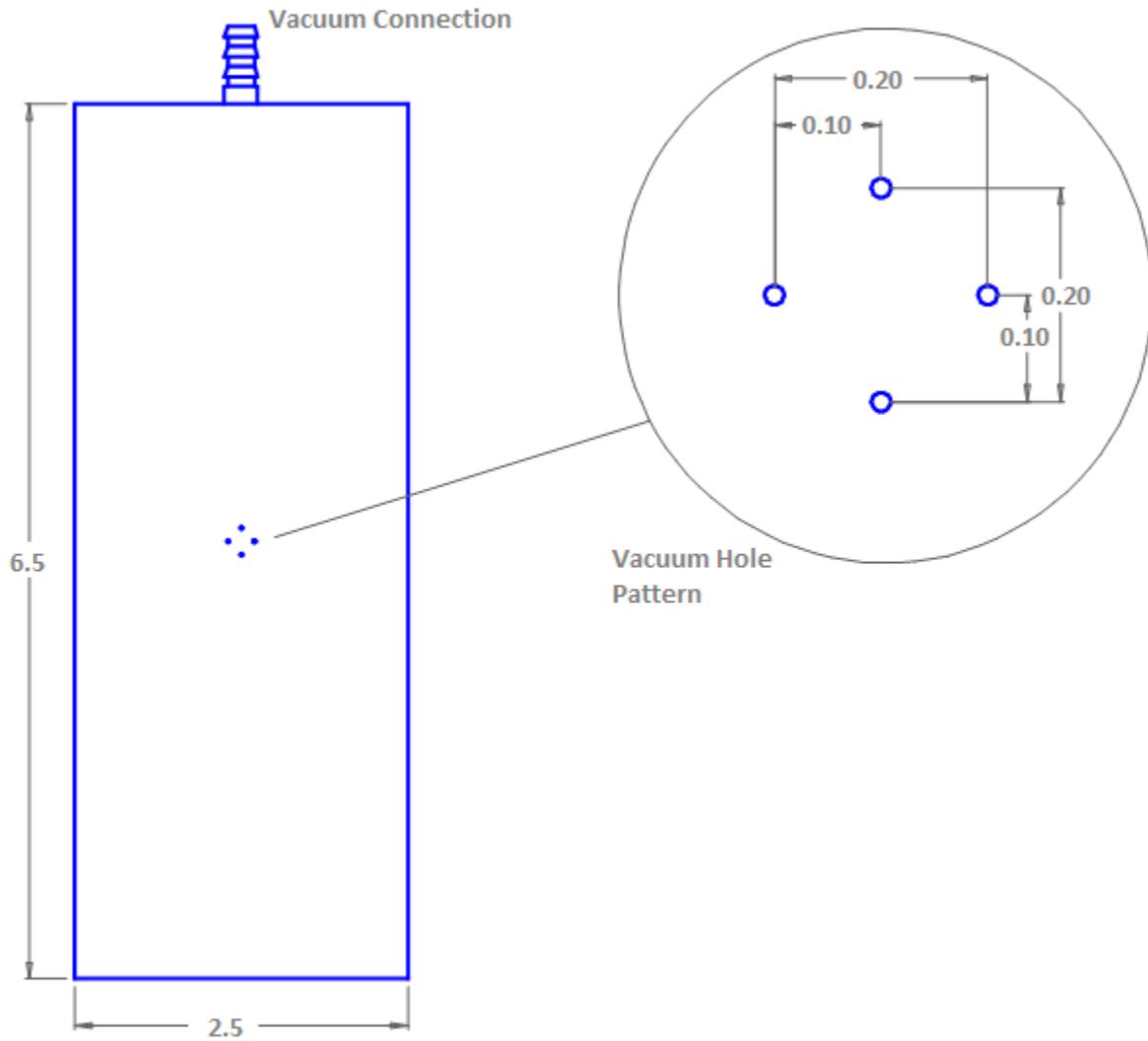
**Drawing 2:** Z travel range (all dimensions are in inches).



## Drawings (continued)

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**Drawing 3:** Location and size of the vacuum holes (all dimensions are in inches)



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