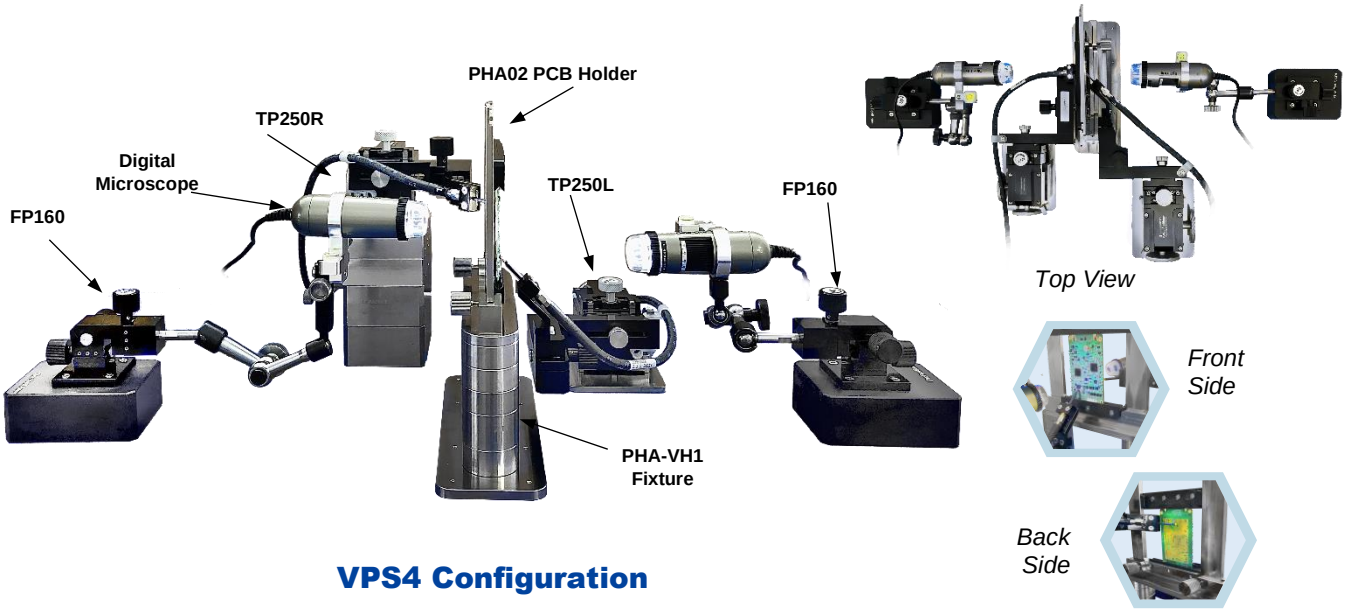
PACKETMICRO
Innovative Benchtop Probing Solutions

VERTICAL PROBE STATION VPS4

DIY PCB PROBE STATION FOR 2-SIDED PROBING OF SMALL PCB BOARDS



VPS4 Configuration

VPS4 is a do-it-yourself (DIY) benchtop probe station designed for vertical probing of small printed-circuit boards. Effortless and straightforward to setup and configure, its compact, lightweight characteristics make it ideal for making signal-integrity and RF measurements in laboratories with limited spaces. VPS4 consists of a VPF4 fixture holding the printed-circuit board, TP250 positioners, FP160 positioners, and Dino-Lite microscopes.

- Compact and lightweight
- Easy to set up and configure
- Aluminum magnetic blocks allow customizable positioning of manipulators
- Holds PCB with height from 0.2” to 4”
- Frame height can be adjusted with magnetic extenders

KEY COMPONENTS

PHA02

PHA-VH1

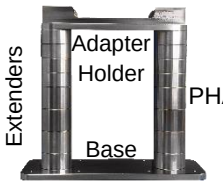
Vertical Probe Fixture

The VPF4 fixture, comprising of a PHA02 (a PCB holder frame and slider bar) and a PHA-VH1, which has adjustable magnetic blocks, is the typical setup for 2-sided probing.

SPECIFICATIONS (PHA-VH1 + PHA02)	
Dimensions HxWxD	Height:194-333 mm (7.6-13.1") Width: 250 mm (13.1”) Depth: 75 mm (2.95”)
Weight	4.9 kg (10.8 lb)

PHA02

PART NUMBERS		
PHA02	Dimensions HxWxD	154 mm x 146 mm x 15 mm (6.2" x 5.8” x 0.6”)
	Weight	0.45 kg (1 lb)
	Max Board Size HxWxD	102 mm x 152 mm x 3 mm (4.0” x 6.0” x 0.12”)



PHA-VH1	Dimensions HxWxD	Height: 56 mm-195 mm (2.2”-7.7”) Width: 208 mm (8.2”) Depth:75 mm (2.95”)
	Weight	4.45 kg (9.8 lb)

Extenders

24.5mm 16mm

Each PHA-VH1 includes 1x adapter holder, 1x fixture base, 8x 16-mm extenders (150 gm), and 6x 25.4 mm extenders (240 gm). The extender diameter is 40 mm.

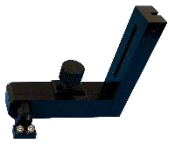
Precision Positioner (TP250)

TP250R

TP250 fixed-arm positioner is designed for holding microprobes, scope probes, and PacketMicro probes. The XYZΘ knobs allows for effortless, high-precision turns. With a magnetic switch, TP250 can be used for both horizontal and vertical probing applications.

SPECIFICATIONS	
XYZ-axis travel	8
Resolution	5µm
Height coarse adjustment	5 mm/step (14 steps)

PART NUMBERS	
TP250L	Precision Positioner with XYZθ control (left-handed)
TP250R	Precision Positioner with XYZθ control (right-handed)
TP250-ARM-AL	Left-handed TP250 arm with a 90-degree adapter head
TP250-ARM-AR	Right-handed TP250 arm with a 90-degree adapter head



TP250-ARM-AR

Flexible Positioner (FP160MS)

FP160MS

FP160MS flex-arm positioner allows a user to move the articulated arm for coarse positioning first and then precisely land the probe tips with reliable contact by turning the XYZ stage and planarization knobs.

SPECIFICATIONS	
Articulated arm	4 links and 3 joints controlled by a single thumb knob
Arm Length	210 mm (8.3”)
XYZ-axis Travel	12 mm with 500 µm/turn (50 TPI)
Planarization Θ control	±7.5°
Dimensions / Weight (LxWxH)	320 (max) x 68 x 250 mm (max), (12.5” x 2.7” x9.8”) / 0.9 kg (2 lb.)
Base Plate	120 L x 90 W x 10.5 mm H (4.7”x 3.6” x 0.45”) / 0.82 kg (1.8 lb.)

FP160MS-MA02

PART NUMBERS	
FP160MS	Flex Positioner with precision XYZ adjustment, flex arm and magnetic switch with universal adapter (UA16)
FP160MS-MA02	Flex Positioner with precision XYZ adjustment, flex arm and magnetic switch with microscope adapter (MA02)

Microscope Adapter (MA02)

Built-in 360° Adjustable (90° step) bubble leveler helps a user to correctly orient the microscope at 90° to the PCB to avoid optical perspective distortion.

SPECIFICATIONS	
Dimensions (LxWxH)	68 x 55 x 25 mm (2.7” x 2.2” x 1”)
Diameter Adjustable	31.5 – 32.5 mm (1.24” – 1.28”)

Pull to adjust orientation

MA02 Adapter in vertical position

MA02 Adapter in horizontal position