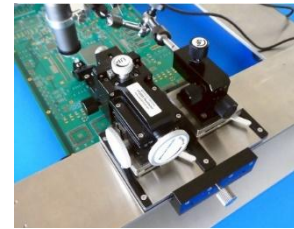
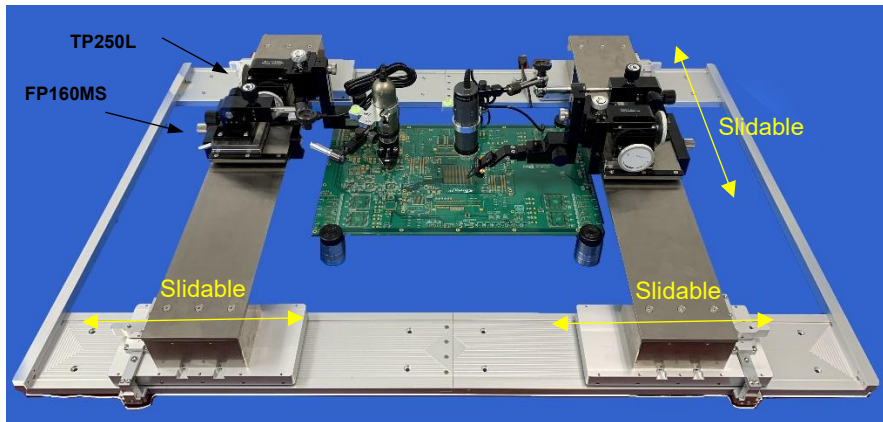
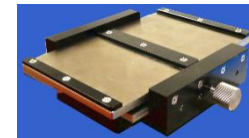


HORIZONTAL PROBE STATION HPS24RP

DIY PROBE STATION FOR LARGE-PCB PROBING



Slider holding probe & microscope



Slider

*US Patent Pending

Video: https://packetmicro.com/videos/PacketMicro-HPS24RP_Horizontal_Probe_Station.mp4

HPS24RP is a do-it-yourself (DIY) benchtop probe station designed for probing large printed-circuit boards. Its compact, light-weight design makes it ideal for signal-integrity and power integrity measurements in laboratories with limited space.

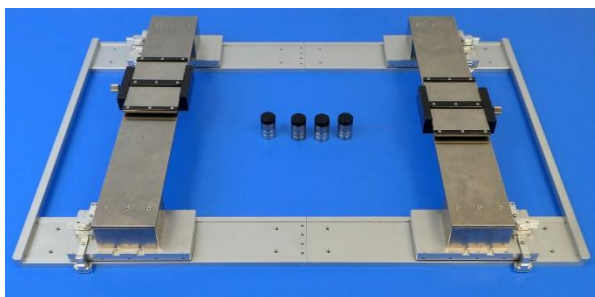
HPS24RP consists of HPF-AR37W25RP4 rolling platform, TP250 positioners, Flex160MS positioners, and Dino-Lite microscopes. By mounting both TP250 and FP160MS on a slider and a slidable vertical platen, a user can quickly move the test probe and microscope close to the test points and then land the probe with the fine adjustment of TP250 accurately. This approach significantly reduces the probing time because the user does not need to adjust the microscope to follow the probe tips separately.



- Compact and lightweight
- Easy to set up and configure
- Fast lock and unlock with mechanical brakes
- Simultaneous movement of positioner and microscope with up/down sliders
- Fast, coarse horizontal movement with slidable platens
- Configurable for 1-sided and 2-sided probing

By adding additional magnetic blocks to the bridge, a TP250 with probe can be placed under the PCB for 2-sided probing of a large PCB.

KEY COMPONENTS



Horizontal Probe Fixture

The typical setup includes 1x HPF-AR37W25RP4 platform, 2x PB100-24 bridges, 2x HPF-SL01 sliders, and 4x PH100 holders.

Dimensions HxWxD	948 x 635 x 330 mm (37.5 x 25 x 4 in)
Weight	22.6 kg (49.6 lb.)
Board Size	Height: Max 456 mm (18") Width: unconstrained Thickness: Max 15 mm



HPF-AR37W25RP4

Horizontal Rolling Platform (Part No: HPF-AR37W25RP4)

HPF-AR37W25RP4	Horizontal Rail Set including 2x HPF-AR37 (37" rail), 4x HPF-RP01 (rolling platform), 2x HPF-ASB25 (25" spacing bar)
Dimensions LxWxH	948 x 635 x 330 mm (37.5 x 25 x 2.4 in)
Weight	10.7 kg (23.6 lb.)



PB100-24

Horizontal Bridge Set (Part No: PB100-24)

PB100-24	Probe Bridge including 1x PSP24 (24" Platen), 2x BL02A (2" block), and 2x BL01A (1" block).
Dimensions LxWxH/Weight	610 x 305 x 83 mm (24 x 4 x 3.3 in), 6.8 kg (15 lb)



HPF-SL01

Slider (Part No: HPF-SL01)

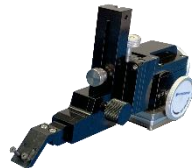
HPF-SL01	Slider for holding TP250 and FP160MS
Dimensions LxWxH/Weight	165 x 132 x 30 mm (6.5 x 5.2 x 1.2 in), 1.1 kg (2.5 lb)



PH100

Horizontal PCB Holder (Part No: PH100)

PH100	Horizontal PCB Holder
Dimensions DxH/Weight	30 mm Diameter x 40 mm Height (1.2 x 1.6 in), 0.23 kg (0.5 lb)



TP250R

Precision Positioner (TP250)

TP250 fixed-arm positioner is designed for holding microprobes, scope probes, and PacketMicro probes. The XYZ θ 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	5 μ m
Height coarse adjustment	5 mm/step (14 steps)
θ (Planarity) control	$\pm 10^\circ$ with 2.5°/turn and 0.025° resolution
Dimensions (LxWxH)/Weight	228 x 76 x 108 mm, 9"x 3"x 4.3" in./ 1.3kg (2.86 lb.)



TP250-ARM-AR

PART NUMBERS

TP250L	Precision Positioner with XYZ θ control (left-handed)
TP250R	Precision Positioner with XYZ θ 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

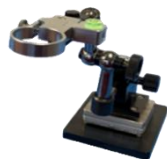


FP160MS

Flexible Positioner (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 μ m/turn (50 TPI)
Planarization θ control	$\pm 7.5^\circ$
Dimensions / Weight (LxWxH)	320 (max) x 68 x 250 mm (max), (12.5" x 2.7" x 9.8") / 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)