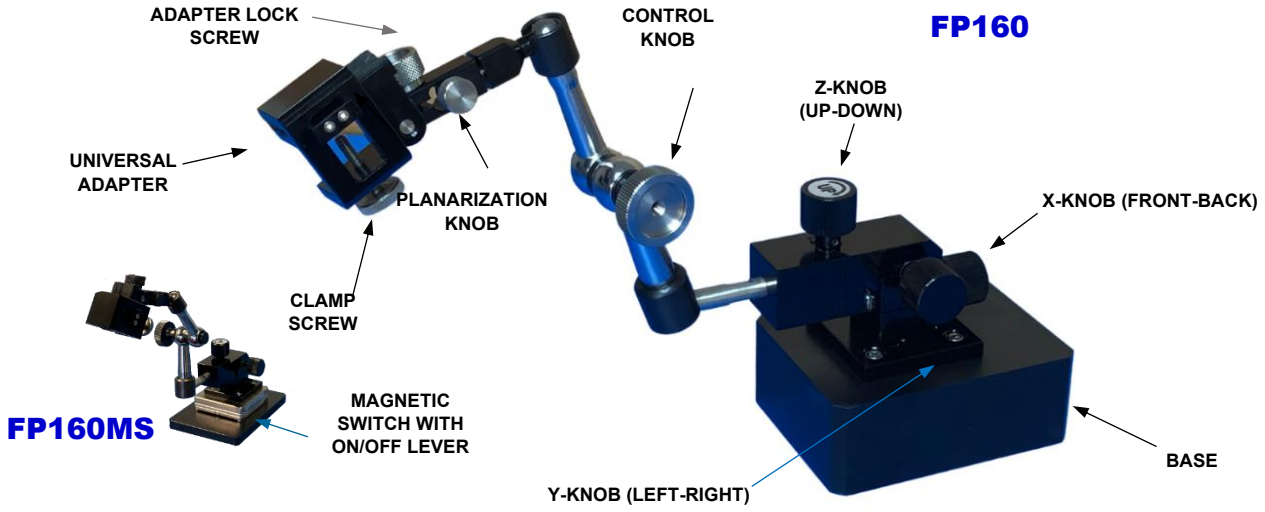
PACKETMICRO
Innovative Benchtop Probing Solutions

# FLEX POSITIONER FP160

## THE FLEXIBLE, HIGH-PRECISION PROBE MANIPULATOR




US Patent 8,836,357

**Video**: https://packetmicro.com/videos/PacketMicro-FP160_Positioner.mp4

FP160 Flex Positioner is an innovative probe positioner for quick and stable hands-free probing. Its unique combination of an articulated arm and an independent precision XYZ stage allows a user to quickly and accurately place the probe on the target. Using the articulated arm for coarse positioning first and then controlling the fine adjustments with the XYZ stage and probe tips planarization knob, one can make good test measurements with reliable probe contact.

- Articulated arm controlled by a single thumb knob
- Independent XYZ stage for fine adjustments of probe position and contact force
- Universal adapter holds most active probes, passive probes, and differential browsers from equipment manufacturers, such as Rohde-Schwarz, Keysight, Tektronix, and Le Croy.

| SPECIFICATIONS | |
|---|---|
| Articulated arm | 4 links and 3 joints controlled by a single thumb knob |
| Arm Length | 210 mm (8.7”) |
| XYZ-axis Travel | 12 mm with 500 µm/turn (50 TPI) |
| Planarization Θ control | ±7.5° |
| Dimensions / Weight | 320 Lmax x 68 W x 278 mm Hmax, (12.5 x 2.7 x10.9”) / 2.8 kg (6.2 lb.) |

## ADAPTERS

**Universal Adapter (UA16-FP160)**

UA16 adapter is for holding large oscilloscope and RF probes

- Size: 25 L x 25 W x 35 mm H (1 x 1 x 1.4”)
- Opening: adjustable 4 – 16 mm (0.16 – 0.63”)

**Microscope Adapter (HDM1)**

HDM1 adapter with fixed level indicator is for holding digital microscopes

- Size: 68 L x 40 W x 25 mm H (2.7 x 1.6 x 1”)
- Diameter adjustable: 31.5 – 32.5 mm (1.24 – 1.28”)

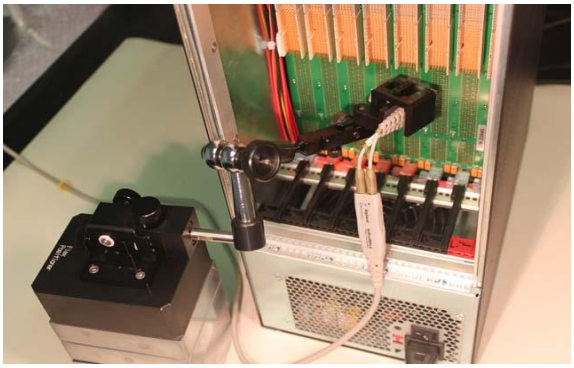
## APPLICATIONS

### A Helping Hand for Engineers

*FP160 for holding an oscilloscope probe*

FP160 with a test probe is ideal for lengthy, unmanned testing and detection of hard-to-find glitches.

### Vertical Probing of Hard-to- Reach Area



*FP160 for vertical probing of a backplane*

The rugged FP160 structure is perfect for the challenging tasks of vertical probing of boards and backplane in a chassis.

| PART NUMBERS | DESCRIPTION |
|---|---|
| FP160 | Articulated-arm positioner with XYZ stage, and universal adapter |
| HDM1 | Microscope adapter with fixed level indicator |
| MA02 | Microscope adapter with adjustable level indicator |
| FP160MS | Articulated-arm positioner with XYZ stage, magnetic switch, and universal adapter |
| FP160MS-MA02 | Articulated-arm positioner with XYZ stage, magnetic switch, and MA02 adapter |

| ACCESSORIES | DIGITAL MICROSCOPE |
|---|---|
| AF4515ZTL | Dino-Lite Edge 1.3MP 10x-140x, LWD, polarizer, AMR |
| AF7115MZTL | Dino-Lite Edge 5MP 10x-140x, LWD, metal housing, polarizer |
| AF7515MZTL | Dino-Lite Edge 5MP 10x-140x, LWD, metal housing, polarizer, AMR |

## FLEX POSITIONER FAMILY

Flex positioner family includes FP160MS, FP160, FP80, and FP40 manipulators for a wide range of applications. The following is a brief summary of their specifications and applications.

| Product | Articulated Arm | Θ Control | Position Control | Base | Dimensions Lmax x W x Hmax | Weight | Applications |
|---|---|---|---|---|---|---|---|
| FP160MS | 210 mm (8.3”) | ±7.5° | XYZ | Magnetic Switch | 320 x 68 x 250 mm (12.5 x 2.7 x9.8”) | 0.9 kg/2 lb. Body 0.8 kg/1.8 lb. Plate | Microscopes, Scope Probes Work with all PacketMicro fixtures |
| FP160 | 210 mm (8.3”) | ±7.5° | XYZ | Metal Base | 320 x 68 x 278 mm (12.5 x 2.7 x10.9”) | 2.8 kg/6.2 lb. All | Scope Probes, Microscopes Standalone operation |
| FP80 | 260 mm (10.2”) | ±7.5° (Z-Axis) | XY | Magnetic Switch | 360 x 68 x 380 mm (14.2 x 2.7 x15”) | 1.6 kg/3.5 lb. Body 0.8 kg/1.8 lb. Plate | Scope Probes, Microscopes Work with some fixtures |
| FP40 | 260 mm (10.2”) | ±7.5° (Z-Axis) | No | Magnetic Switch | 350 x 60 x 380 mm (13.8 x 2.4 x15”) | 1.5 kg/3.3 lb. Body 0.8 kg/1.8 lb. Plate | Microscopes, Scope Probes Work with some fixtures |