# **Articulated Arms**

► PPM203B • PPM100



► PPM100.

# **Probing Fine Pitch Devices**

Probing today's designs, with their delicate fine pitch devices, is safer and more convenient with Tektronix PPM articulating arms. The PPM series allows designers to guide standard handheld probes onto the small geometries of fine-pitch interconnects, SMD packages, MCMs (multi-chip-modules), hybrids and ICs.

The PPM articulating arms provide high accuracy and resolution by mechanically assisted probe positioning, helping designers meet the physical demands of probing the constantly shrinking geometry of devices.

## **PPM203B**

The PPM203B has a three axis arm system. It is a general-purpose benchtop probing aid designed to be used when probing PC boards, hybrids and MCMs that employ fine-pitch devices and interconnects.

The PPM203B incorporates a weighted base that makes it well-suited to probing fine pitches in benchtop applications.

### **PPM100**

The PPM100 is a low cost probing aid designed to provide quick and easy access to PC boards, hybrid circuitry and many other devices that require hands-free probing. The PPM100 has a flexible "gooseneck" arm allowing multiple adjustment positions. Once positioned the course adjust knobs lock the probe holder into position. A fine adjustment control at the arm head allows further pressure adjustment after the probe is initially positioned. The spring compliance incorporated into the probe head holder keeps pressure on the probe to circuit, maintaining a superior connection to the device under test.

The PPM100 includes both a weighted base for desktop applications and a C-clamp base for attaching to chassis or rack applications.

#### ► Features & Benefits

Three Axis Articulated Arm with HI-mass Base (PPM203B)

Multi-turn Fine Adjustment Controls for All Three Axes (PPM203B)

Fully Flexible "Gooseneck" Arm for Different Positions (Locks Securely in Place with Adjustment Control Knob) (PPM100)

Fine Adjustment Knob on Probe Holder (PPM100)

 Spring Compliance in Probe Holder Keeps Pressure at the Probe Point (PPM100)

Heavy Base for Desktop Applications or C-clamp for Other (Rack) Applications, Both Included (PPM100)

Adaptable to Most Tektronix Probe Types

## Applications

Research, Electronic Design, Service and Manufacture of Small Geometry Circuitry

- Fine-pitched Controls to Access Circuitry Such as MCMs, Hybrids and Other IC Technology
- Multiple Test Points Access Allowing Hands Free Operation





► PPM203B.

# **▶** Characteristics

# ▶ PPM203B Probe Adapter Compatibility Chart

Probe Adapter Part Number	Probe Type	Compatible Probe List
407-4365-00	SMD Passive Probes	P6563A, P6562A, P6561A
407-4366-00	2.5 mm Subminiature Tip Probes	P6130, P6131, P6133, P6136
407-4367-00	3.5 mm Compact Tip Probes	P6133 Option 25, P6134C, P6136 Option 25, P6137, P6138A, P6139A, P6339A, P5050, P6158
407-4368-00	SMD Active Probes	P6243, P6245, P6209, P6249, P7240, P7260, P6330, P7330, P7225, P6241
407-4369-00	5 mm Miniature Probes	P6101B, P6103B, P6105A, P6106A, P6109B, P6204, P6205
407-4370-00	4 mm Active & Zo Probes	P6207, P6217, P6150

# **Number of Manipulator Axes**

**PPM203B** – 3 (X, Y, Z).

**PPM100 –** 3 (X, Y, Z).

(Flexible "gooseneck" arm provides nearly unlimited degrees of freedom.)

# **Probe Mounting**

**PPM203B** – Accepts most Tektronix probes including SMD, 2.5 mm, 3.5 mm, 4 mm, 5 mm and P6245 style probes using metal probe adapter clamps.

**PPM100** – Accepts most Tektronix probes using a flexible retention ring at the end of the probe holder.

# Attachment Method to Work Surface

**PPM203B** – Manually positioned with weighted HI-mass base.

**PPM100** – Manually positioned base with two mounting angles for additional test point access, or C-clamp for securing the adjustable arm to other fixtures, extrusions, chassis and bench tips.

# **Manipulator Lead Screw Pitch**

PPM203B – 10 threads per inch.

PPM100 - N/A.

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SMD Passive Probes	P6563A, P6562A, P6561A
2.5 mm Subminiature Tip Probes	P6130, P6131, P6133, P6136
3.5 mm Compact Tip Probes	P6133 Option 25, P6134C, P6136 Option 25, P6137, P6138A, P6139A, P6339A, P5050, P6158
SMD Active Probes	P6243, P6245, P6209, P6249, P7240, P7260, P7225, P6241
5 mm Miniature Probes	P6101B, P6103B, P6105A, P6106A, P6109B, P6204, P6205
4 mm Active & Zo Probes	P6207, P6217, P6150
Active Differential Probes	P6246, P6247, P6248, P6330, P7330

The PPM100 comes with 1 flexible arm with probe holder. You may order additional arms to affix to the post, which supports up to 3.

#### **Articulated Arm Reach**

PPM203B -X, Y: 14 inches.

Theta: 180°. PPM100 -

X: 8 to 10 inches with base, 16 inches with clamp. Y: 16 inches with base, 19 inches with clamp.

# **▶** Ordering Information

#### **PPM203B**

Articulated arm, 3 axis with HI-mass base.

Includes: Articulated arm; HI-mass base; 6 probe adapters to attach various probe styles.

## **Probe Adapters**

#### **Additional Probe Adapters Can** be Ordered by the Following Part Numbers:

SMD Probes - Order 407-4365-00.

P6245 - Order 407-4368-00.

4 mm, Active Probes - Order 407-4370-00.

2.5 mm, Subminiature Probes -Order 407-4366-00.

3.5 mm, Compact Probes - Order 407-4367-00.

5 mm, Miniature Probes – Order 407-4369-00.

#### **PPM100**

Flexible arm probe positioner, 3 axis with HI-mass base and C-clamp.

Includes: HI-mass base with interlocking feet; probe post; C-clamp with post; adjustable (flexible) arm with probe holder; flexible retention rings (8 each).

# Replaceable Parts List

Post - Order 384-1861-00.

Flexible Arm with Probe Holder -Order 020-2473-00.

Clamp - Order 343-1677-00.

Flexible Retention Rings (set of 8) -Order 016-1914-00.

### **Articulated Arms**

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