

# Articulated Arms for Tektronix Probes

## PPM203B PPM100 Datasheet



The PPM203B and PPM100 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.

### Features and 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

### 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 with 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.



PPM203B

## 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 coarse 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.

## Specifications

All specifications are guaranteed unless noted otherwise.

### Characteristics Container

#### 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, TAP, TDP, Z-Active, and TriMode 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

#### 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

The PPM100 comes with one flexible arm with probe holder. You can order additional arms to affix to the post, which supports up to three arms.

## Ordering information

### Models

#### PPM203B

Articulated arm, 3 axis with HI-mass base.

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

#### 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).

### Compatibility charts

#### PPM203B Probe Adapter

		Compatibility probe list	
Probe adapter part number	Probe type	Current	Legacy
<b>Standard shipped adapters</b>			
407-4365-xx	SMD passive probes	-	P6561A, P6562A, P6563A
407-4366-xx	2.5 mm subminiature probes	-	P6130, P6131, P6133, P6136, P6231
407-4367-xx	3.5 mm compact probes	P5050B, P6139B	P5050, P6133 Option 25, P6134C, P6136 Option 25, P6137, P6138A, P6139A, P6339A, P6158
407-4368-xx	SMD active probes	P6243, P6245, P7240	P6209, P6241, P6249, P6330, P7225, P7330, P7260
407-4369-xx	5 mm miniature probes	P6101B, P75PDPM	P6103B, P6105A, P6106A, P6109B, P6204, P6205
407-4370-xx	4 mm active and Z <sub>0</sub> probes	-	P6207, P6217, P6150
407-4980-xx	SMD active, TAP, TDP probes	P6243, P6245, P7240, TAP1500, TAP2500, TAP3500, TDP3500	P6209, P6241, P6249, P7260, P6330, P7225, P7330, P7350
407-4984-xx	Active differential probes	P6247, P6248, P6251, TDP0500, TDP1000, TDP1500	P6250, P6246
<b>Other optional adapters</b>			
013-0339-01	Z-Active differential probes	-	P7360, P7380, P7340A, P7360A, P7380A, P7313
Precision differential probing module P75PDPM	TriMode probes	P7504, P7506, P7508, P7513A, P7516, P7520A	P7513, P7520
407-6019-xx	TriMode probes	P7708, P7713, P7716, P7720 with P77BRWSR accessory	-

PPM100 Probe Adapter

Probe type	Compatibility probe list	
	Current	Legacy
SMD passive probes	-	P6561A, P6562A, P6563A
2.5 mm subminiature probes	-	P6130, P6131, P6133, P6136, P6231
3.5 mm compact probes	P5050B, P6139B	P5050, P6133 Option 25, P6134C, P6136 Option 25, P6137, P6138A, P6139A, P6339A, P6158
SMD active probes	P6243, P6245, P7240	P6209, P6241, P6330, P6249, P7225, P7260, P7330
5 mm miniature probes	P6101B, P75PDPM	P6103B, P6105A, P6106A, P6109B, P6204, P6205
4 mm active and Z <sub>0</sub> probes		P6150, P6207, P6217
SMD active, TAP, TDP probes	P6243, P6245, P7240, TAP1500, TAP2500, TAP3500, TDP3500	P6209, P6241, P6249, P6330, P7225, P7260, P7330, P7350
Active differential probes	P6247, P6248, P6251, TDP0500, TDP1000, TDP1500	P6246, P6250
Z-Active differential probes (Requires adapter fixture: 013-0339-01)	-	P7313, P7340A, P7360, P7360A, P7380, P7380A
TriMode probes (Requires precision differential probing module P75PDPM)	P7504, P7506, P7508, P7513A, P7516, P7520A	P7513, P7520

## Replaceable parts

### Replaceable parts list

384-1861-xx	Post
020-2473-xx	Flexible arm with probe holder
343-1677-xx	Clamp
016-1914-xx	Flexible retention rings (set of 8)

CE Marking Not Applicable.





Call Us 1.877.571.7901

**ASEAN / Australasia** (65) 6356 3900  
**Belgium** 00800 2255 4835\*  
**Central East Europe and the Baltics** +41 52 675 3777  
**Finland** +41 52 675 3777  
**Hong Kong** 400 820 5835  
**Japan** 81 (3) 6714 3086  
**Middle East, Asia, and North Africa** +41 52 675 3777  
**People's Republic of China** 400 820 5835  
**Republic of Korea** +822 6917 5084, 822 6917 5080  
**Spain** 00800 2255 4835\*  
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**Austria** 00800 2255 4835\*  
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**Luxembourg** +41 52 675 3777  
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**Canada** 1 800 833 9200  
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**Mexico, Central/South America & Caribbean** 52 (55) 56 04 50 90  
**Norway** 800 16098  
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**Switzerland** 00800 2255 4835\*  
**USA** 1 800 833 9200

\* European toll-free number. If not accessible, call: +41 52 675 3777

**For Further Information.** Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit [www.tek.com](http://www.tek.com).

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