

# Passive 1x/10x Voltage Probe

## P2220 P2221 Datasheet



Tektronix passive probe solutions provide high reliability and testing accuracy for basic oscilloscope measurements. The P2220 and P2221 are compact passive probes with selectable 1X/10X attenuation designed for use with selected Tektronix oscilloscopes.

### Key features

- 1x/10x attenuation
- 200 MHz bandwidth

- 1.5 m length
- UL3111-1, CSA1010.1, EN61010-1, EN61010-2-031, and IEC61010-2-031

### Applications

- Relative low-frequency measurements
- Low-frequency computer and telecom measurements
- Power supplies
- Low-frequency amplifiers

### P2220 P2221 passive voltage probes

The P2220 and P2221, 200 MHz passive voltage probes permit selection of 1x or 10x attenuation, using a switch located on the probe head.

The P2220 probe is compatible with TDS200, TDS1000, TDS1000B, TDS2000, TDS2000B, and TPS2000 Series oscilloscopes. The P2220 probe also provides floating measurement capability up to 30 V<sub>RMS</sub> with TPS2000 Series oscilloscopes only. (Note: Do not float with TDS2000, TDS2000B, TDS1000, TDS1000B, or TDS200 Series oscilloscopes.)

The P2221 is compatible with MSO2000 and DPO2000 Series oscilloscopes.

## Specifications

All specifications are guaranteed unless noted otherwise. All specifications apply to all models unless noted otherwise.

	10X	1x
Bandwidth	DC to 200 MHz	DC to 6 MHz
Probe length	1.5 m	1.5 m
Attenuation ratio	10:1	1:1
Compensation range		All oscilloscopes with 1 MΩ input
	P2220	15 to 25 pF
	P2221	10 to 25 pF
Input capacitance	17.0 pF	110 pF
Input resistance	10 MΩ	1 MΩ
Maximum input voltage	300 V Cat II	150 V Cat II
Maximum voltage between reference lead and earth ground	30 V <sub>RMS</sub> <sup>1</sup>	30 V <sub>RMS</sub> <sup>1</sup>

## Ordering Information

<b>P2220</b>	Passive Probe, 1x/10x, 200 MHz Passive Voltage Probe Includes retractable hook tip (013-0107-xx), 6-inch ground lead (196-3466-xx), adjustment tool (003-1433-xx), marker band set (016-1315-xx), instruction manual (071-1464-xx). <sup>2</sup>
<b>P2221</b>	Passive Probe, 1x/10x, 200 MHz Passive Voltage Probe for MSO/DPO2000 Series oscilloscopes Includes retractable hook tip (013-0107-xx), 6-inch ground lead (196-3466-xx), adjustment tool (003-1433-xx), marker band set (016-1315-xx), instruction manual (071-2335-xx). <sup>2</sup>



<sup>1</sup> The float voltage must be subtracted from the tip to earth ground voltage. For example, if the reference lead is floated to 30 V<sub>RMS</sub> while the probe is in the 10x position, the tip voltage to the reference lead is limited to 270 V<sub>RMS</sub>.

<sup>2</sup> The accessory quantities may differ when multiple probes are shipped with an oscilloscope/probe system.



**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 3010  
**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\*  
**Taiwan** 886 (2) 2656 6688

**Austria** 00800 2255 4835\*  
**Brazil** +55 (11) 3759 7627  
**Central Europe & Greece** +41 52 675 3777  
**France** 00800 2255 4835\*  
**India** 000 800 650 1835  
**Luxembourg** +41 52 675 3777  
**The Netherlands** 00800 2255 4835\*  
**Poland** +41 52 675 3777  
**Russia & CIS** +7 (495) 6647564  
**Sweden** 00800 2255 4835\*  
**United Kingdom & Ireland** 00800 2255 4835\*

**Balkans, Israel, South Africa and other ISE Countries** +41 52 675 3777  
**Canada** 1 800 833 9200  
**Denmark** +45 80 88 1401  
**Germany** 00800 2255 4835\*  
**Italy** 00800 2255 4835\*  
**Mexico, Central/South America & Caribbean** 52 (55) 56 04 50 90  
**Norway** 800 16098  
**Portugal** 80 08 12370  
**South Africa** +41 52 675 3777  
**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).

Copyright © Tektronix, Inc. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks, or registered trademarks of their respective companies.



09 Feb 2016 51W-17984-3

