

# 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

Specifications apply to both probes unless indicated 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

	10X	1x
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

- P2220** 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>
- P2221** 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.

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

Updated 10 April 2013

**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.tektronix.com](http://www.tektronix.com).

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19 Apr 2013

51W-17984-2

