

# Passive 1x/10x Voltage Probe

## P2220 • P2221 Data Sheet



P2220

### Features & Benefits

- 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.

ASEAN / Australasia (65) 6356 3900

Austria +41 52 675 3777

Balkans, Israel, South Africa and other ISE Countries +41 52 675 3777

Belgium 07 81 60166

Brazil +55 (11) 40669400

Canada 1 (800) 661-5625

Central East Europe, Ukraine, and the Baltics +41 52 675 3777

Central Europe & Greece +41 52 675 3777

Denmark +45 80 88 1401

Finland +41 52 675 3777

France +33 (0) 1 69 86 81 81

Germany +49 (221) 94 77 400

Hong Kong (852) 2585-6688

India (91) 80-42922600

Italy +39 (02) 25086 1

Japan 81 (3) 6714-3010

Luxembourg +44 (0) 1344 392400

Mexico, Central/South America & Caribbean 52 (55) 54247900

Middle East, Asia, and North Africa +41 52 675 3777

The Netherlands 090 02 021797

Norway 800 16098

People's Republic of China 86 (10) 6235 1230

Poland +41 52 675 3777

Portugal 80 08 12370

Republic of Korea 82 (2) 6917-5000

Russia & CIS +7 (495) 7484900

South Africa +27 11 206 8360

Spain (+34) 901 988 054

Sweden 020 08 80371

Switzerland +41 52 675 3777

Taiwan 886 (2) 2722-9622

United Kingdom & Ireland +44 (0) 1344 392400

USA 1 (800) 426-2200

For other areas contact Tektronix, Inc at: 1 (503) 627-7111

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## Characteristics

### 10x Position

Bandwidth – DC to 200 MHz

Probe Length – 1.5 m

Attenuation Ratio – 10:1

Compensation Range –

P2220: 15 to 25 pF

P2221: 10 to 25 pF

Input Capacitance –

P2220: 17.0 pF (typ)

P2221: 17.0 pF (typ)

Input Resistance – 10 MΩ

Maximum Input Voltage – 300 V CAT II

Maximum Voltage Between Reference Lead and Earth Ground – 30 V<sub>RMS</sub>\*1

### 1x Position

Bandwidth – DC to 6 MHz

Probe Length – 1.5 m

Attenuation Ratio – 1:1

Compensation Range – All oscilloscopes with 1 MΩ input

Input Capacitance –

P2220: 110 pF (typ)

P2221: 110 pF (typ)

Input Resistance – 1 MΩ

Maximum Input Voltage – 150 V CATII

Maximum Voltage Between Reference Lead and Earth Ground – 30 V<sub>RMS</sub>\*1

\*1 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>.

## 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).\*2

### 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).\*2

\*2 The accessory quantities may differ when multiple probes are shipped with an oscilloscope/probe system.



**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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