

TEKTRONIX

P5200

The Tektronix P5200 is an active high-voltage differential oscilloscope probe designed to allow safe, floating measurements of circuit components. With a bandwidth of 50 MHz, attenuation settings of 50x and 500x, and a maximum differential voltage range of up to ± 1300 V, it is ideal for analyzing power electronics, motor drives, and industrial electrical systems. The probe features standard safety banana plug inputs and an integrated warning system with audible and visual overrange indicators.

SPECIFICATIONS

General

Interfaces	BNC (male) output with specialized power jack
Warm-up Period	20 minutes
Standard Warranty	1 year

Physical

Power Supply	9 V DC via external AC adapter or powered from a Tektronix 1103 power supply
Operating Temperature	0 to +50 °C °C

Electrical & Signal Performance

Bandwidth	50 MHz
Rise Time	< 7 ns
Attenuation Ratios	50x / 500x
DC Attenuation Accuracy	±3%
Maximum Differential Voltage (50x)	±130 V (DC + peak AC)
Maximum Differential Voltage (500x)	±1300 V (DC + peak AC)
Maximum Common-Mode Voltage	±1300 V (DC + peak AC)
Maximum Input Voltage-to-Earth (RMS)	1000 V RMS
Maximum Input Voltage-to-Earth (CAT Rating)	1000 V CAT II / 600 V CAT III
Input Resistance (Differential)	8 MΩ
Input Capacitance (Differential)	4 pF
Input Resistance (Each Input to Ground)	4 MΩ
Input Capacitance (Each Input to Ground)	8 pF
Common-Mode Rejection Ratio (CMRR) at 50/60 Hz	-80 dB
Common-Mode Rejection Ratio (CMRR) at 100 kHz	-50 dB
Common-Mode Rejection Ratio (CMRR) at 1 MHz	-30 dB
Output Voltage Range (Into 1 Megohm)	±2.6 V

Connectivity & Interface

Output Connector Type	BNC (male)
Oscilloscope Termination Requirement	1 MΩ
Input Lead Connection Interface	Integrated banana plugs (shrouded)

Power Requirements

Power Source Options	External AC Adapter (9 V DC output) or Tektronix 1103 Power Supply
AC Adapter Output	9 VDC, 200 mA

Safety & Compliance

Overvoltage Category Rating	1000 V CAT II / 600 V CAT III
Safety Standards	UL3111-1, CSA1010.1, EN61010-1, IEC61010-2-031
Overrange Indicator	Audible buzzer and red LED

Environmental Specifications

Operating Temperature Range	0 °C to +50 °C
Storage Temperature Range	-40 °C to +75 °C
Operating Humidity Range (Relative Humidity)	Up to 90% RH at or below 30 °C
Operating Altitude Limit	2000 m
Storage Altitude Limit	15240 m

Physical Characteristics

Input Lead Length	30 cm
Output Cable Length	1.5 m

Accessories & Calibration

Calibration Interval Requirement	1 year
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Performance

Propagation Delay	18 ns (typical)
Output Impedance	50 Ω (nominal)
Output Offset	< ±10 mV (typical)

Power

Battery Life	3 hours (typical with alkaline battery)
Current Consumption	35 mA (typical)

Environmental & Compliance

Pollution Degree	2
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Electrical Characteristics

Output Noise	< 2.5 mV RMS (typical, referred to output)
Overrange Threshold	> ±130 V (at 50x attenuation), > ±1300 V (at 500x attenuation)

Environmental

Storage Humidity Range	Up to 90% RH (non-condensing) at +40 °C
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TECHNOLOGY

Active High-Voltage Differential Probe

APPLICATIONS

Floating measurements, power supply analysis, motor control, power semiconductor evaluation

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.