

KEYSIGHT TECHNOLOGIES (AGILENT HP)

53210A

The Keysight (formerly Agilent) 53210A is a single-channel RF frequency counter optimized for fast, precise frequency measurements. It offers a standard base bandwidth of 350 MHz with 10 digits/second resolution, and is expandable up to 15 GHz via optional microwave channels. The instrument features a 4.3-inch color graphical display, internal memory for 1 million readings, and standard USB and LXI-C/LAN interfaces.

SPECIFICATIONS

General

Interfaces	LAN (LXI-C), USB 2.0 standard; GPIB optional
Display	4.3-inch color graphical display
Warm-up Time	45 minutes
Calibration Interval	1 year

Physical

Power Supply	100 - 240 VAC @ 50/60 Hz; 100 - 120 VAC @ 400 Hz; 90 VA max
Operating Temperature	0 to 55 °C
Dimensions (W×H×D)	261.1 x 103.8 x 303.2 mm
Weight	3.9 kg

General Measurement Characteristics

Frequency Resolution (Digits per Second)	10 digits/s
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Input Characteristics (Standard Channels)

Number of Standard Channels	1
Standard Channel Frequency Range	Up to 350 MHz

Input Characteristics (Optional Microwave Channel)

Optional Microwave Channels	6 GHz or 15 GHz (by option)
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Math, Statistics, and Data Management

Trend Plot / Histogram Display	Yes
Math Operations	Built-in math analysis
Internal Memory Capacity (Readings)	1,000,000
Non-Volatile Storage (USB Flash Drive Support)	Yes

Connectivity and Programming

Standard Interfaces	USB 2.0, LAN
Optional Interfaces	GPIB
LXI Compliance Class	LXI-C
Native Programming Language (SCPI)	Yes

Physical and Power Specifications

Battery Option Availability	Optional Lithium-Ion Battery (supports remote usage and timebase warmup)
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Inputs & Outputs

Input Coupling	AC or DC (selectable)
External Reference Input Frequencies	1 MHz, 5 MHz, 10 MHz
Timebase Output Frequency	10 MHz
Channel 1 Input Connector	BNC (female)
Microwave Channel Connector (Opt 106 / 115)	Type-N (female)

Environmental

Storage Temperature	-30°C to 70°C
Maximum Operating Altitude	3,000 meters (9,842 ft)

Power

AC Mains Voltage Range	100 V to 240 V ±10% (50/60 Hz); 100 V to 120 V ±10% (400 Hz)
Maximum Power Consumption	90 VA max

Compliance

EMC Compliance	IEC 61326-1, EN 61326-1
Safety Compliance	IEC 61010-1, EN 61010-1

TECHNOLOGY

Frequency Counter

APPLICATIONS

RF Frequency Measurement

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