

KEYSIGHT TECHNOLOGIES (AGILENT HP)

5350B

The Keysight (Agilent/HP) 5350B is a high-performance CW Microwave Frequency Counter capable of measuring signals from 10 Hz to 20 GHz. Built with integrated gallium arsenide (GaAs) microwave components, it delivers robust reliability and features exceptional sensitivity down to -40 dBm. It offers excellent throughput with measurement speeds up to 120 measurements per second over HP-IB, alongside advanced capabilities like automatic amplitude discrimination and mathematical scaling/offset. Its fast acquisition times and 1 GHz/s tracking speed make it highly suitable for testing voltage-controlled oscillators and tracking source drift.

SPECIFICATIONS

General

Interfaces	HP-IB (IEEE-488)
Display	Liquid Crystal Display (LCD)

Physical

Operating Temperature	0 to 50 °C
-----------------------	------------

Input Characteristics

Frequency Range	10 Hz - 20 GHz
Sensitivity	To -40 dBm
Automatic Amplitude Discrimination	Yes (measures frequency of the highest-amplitude signal)
Acquisition Time (Automatic Mode)	60 ms (fast acquisition tracking mode)
Acquisition Time (Manual Mode)	20 ms
Kickback Noise (Sleep Mode)	-70 dBm

Measurement and Display

Tracking Speed	1 GHz/s
----------------	---------

Connectivity and Interfaces

Remote Control Interface	HP-IB (Fully Programmable)
--------------------------	----------------------------

Inputs & Outputs

Microwave Input Connector (Input 2)	Type-N (female)
Low Frequency Input Connector (Input 1)	BNC (female)
Microwave Input Impedance	50 Ω nominal
Microwave Input Damage Level	+25 dBm (peak ± 5 VDC)
Low Frequency Input (Input 1) Coupling	AC
Timebase Output Frequency	10 MHz

Measurement Characteristics

Measurement Resolution	1 Hz to 1 MHz (selectable)
------------------------	----------------------------

Timebase

Internal Timebase Frequency	10 MHz
Standard Timebase Aging Rate	< 1 x 10 ⁻⁷ / month
High-Stability Timebase (Option 001) Aging Rate	< 5 x 10 ⁻¹⁰ / day

Performance

Microwave Input (Input 2) FM Tolerance	20 MHz p-p
--	------------

TECHNOLOGY

Microwave Frequency Counter

APPLICATIONS

Microwave frequency measurement, VCO tuning and testing, automated test system integration

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