

KEYSIGHT TECHNOLOGIES (AGILENT HP)

53152A

The Keysight (formerly Agilent/HP) 53152A is a CW microwave frequency counter and power meter designed to operate from 50 MHz to 46 GHz. It simplifies test setups by using a single ultra-wideband input to simultaneously measure both frequency and power. Built for both benchtop and field applications, it features an analog peaking indicator, a rugged lightweight design, and optional battery operation.

SPECIFICATIONS

General

Interfaces	GPIB, RS-232
Display	LCD with analog peaking indicator
Timebase Frequency	10 MHz

Physical

Power Supply	90-132 VAC (47-440 Hz) / 198-264 VAC (47-66 Hz); 50 VA max
Operating Temperature	0 to 55 °C
Dimensions (W×H×D)	213 x 88.5 x 300 mm
Weight	4.0 kg
Weight with Battery (Option 002)	6.4 kg

Microwave Input

Frequency Range	50 MHz to 46 GHz
Input Topology	Single ultra-wideband input
Connector Type	2.4 mm

Frequency Measurement

Measurement Types	Simultaneous frequency and power measurement
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Interfaces and Display

Peaking Indicator	Analog peaking indicator
Remote Communication Interfaces	GPIB, RS-232 standard

Timebase / Reference Oscillator

High-Stability Option	Optional oven timebase
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Power Requirements

Battery Option Type	Optional battery operation
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Physical Specifications

Carrying Case	Optional soft carrying case
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Inputs

Channel 1 Sensitivity (26.5 to 40 GHz)	-15 dBm
Channel 1 Sensitivity (40 to 46 GHz)	-10 dBm
Channel 2 Frequency Range	10 Hz to 125 MHz

Performance

Frequency Resolution	1 Hz to 1 MHz (selectable)
Power Measurement Resolution	0.01 dB
FM Tolerance	20 MHz p-p
Acquisition Time (Normal)	< 125 ms
Standard Timebase Aging Rate	< 1×10^{-7} / month
Channel 1 Sensitivity (50 to 300 MHz)	-20 dBm
Channel 1 Sensitivity (300 MHz to 12.4 GHz)	-33 dBm
Channel 1 Sensitivity (12.4 to 26.5 GHz)	-27 dBm
Channel 1 Maximum Operating Level	+5 dBm

Inputs & Outputs

Channel 1 Connector	2.4 mm (female)
Channel 2 Connector	BNC (female)

Frequency

Channel 1 Frequency Range	50 MHz to 46 GHz
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Timebase

Option 001 (Oven Timebase) Aging Rate	< 5×10^{-10} per day
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Power

DC Input Voltage	11 to 28 VDC
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Environmental

Storage Temperature	-40 °C to +71 °C
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TECHNOLOGY

Microwave

APPLICATIONS

RF and Microwave 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.