

KEYSIGHT TECHNOLOGIES (AGILENT HP)

3585B

The Keysight (Agilent HP) 3585B is a high-performance 20 Hz to 40.1 MHz spectrum analyzer designed for low-frequency and RF signal analysis. Featuring a built-in tracking generator, exceptional spurious-free dynamic range up to 100 dB, and a narrow 3 Hz resolution bandwidth, it is widely used in telecommunications, audio, and baseband frequency measurements.

SPECIFICATIONS

General

Interfaces	HP-IB (IEEE-488)
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Physical

Operating Temperature	0 to 55 °C °C
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Frequency Specifications

Frequency Range (50 Ohm / 75 Ohm)	20 Hz to 40.1 MHz
Frequency Range (1 Megohm)	20 Hz to 40.1 MHz
Frequency Resolution	0.1 Hz
Resolution Bandwidth (RBW) Range	3 Hz to 30 kHz
Resolution Bandwidth (RBW) Steps	1, 3, 10 sequence
Video Bandwidth (VBW) Range	1 Hz to 30 kHz
Video Bandwidth (VBW) Steps	1, 3, 10 sequence
Reference Frequency Aging Rate	$\pm 1 \times 10^{-7}$ per month

Amplitude Specifications

Amplitude Measurement Range (50 Ohm)	-137 dBm to +30 dBm
Harmonic Distortion	< -80 dBc
Intermodulation Distortion	< -80 dBc
Spurious Responses (Non-Harmonic)	< -80 dBc

Tracking Generator Specifications

Tracking Generator Frequency Range	20 Hz to 40.1 MHz
Tracking Generator Output Impedance	50 ohms

Inputs and Outputs

RF Input Connector Type	BNC
Input Impedance Options	50 ohms, 75 ohms, 1 Megohm
External Reference Output Frequency	10 MHz
External Reference Output Level	≥ 0 dBm (into 50 ohms)
Probe Power Output	+15 Vdc, -12.6 Vdc, up to 150 mA
Rear Panel Display Outputs	X, Y, Z BNC connectors

Measurement and Marker Functions

Marker Resolution (Amplitude)	0.01 dB
Noise Marker Mode	Yes
Trace Storage	A and B memories

Environmental and Safety

Storage Temperature Range	-40 °C to 75 °C
Warm-up Time	20 minutes

Input Specifications

Input Return Loss	≥ 26 dB (VSWR ≤ 1.1) with ≥ 10 dB attenuation; ≥ 20 dB (VSWR ≤ 1.22) with 0 dB attenuation
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Inputs

1 M Input Shunt Capacitance	< 30 pF
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Rear Panel Outputs

Intermediate Frequency (IF) Output Frequency	350 kHz
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Physical Characteristics

Shipping Weight	52.2 kg (115 lb)
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TECHNOLOGY

Superheterodyne Spectrum Analyzer

APPLICATIONS

Low-frequency and RF spectrum analysis, filter characterization, and signal monitoring

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