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Data Sheet

August 13, 2026

HP / AGILENT

HP / Agilent 83525B RF plug-in, 0.01-8.4 GHz, low harmonics

HP 83525B RF Plug-in 0.01 to 8.4 GHz Low Harmonics The HP 83525B covers 10 MHz (0.01 GHz) to 8.4 GHz in an 8350-series mainframe by PIN-switching heterodyne low band (0.01 to 2.1 GHz) with a 2 to 8.4 GHz YIG high band. Frequency accuracy and linearity match the 83525A family. Maximum leveled power is +10 dBm with greater than 45 dBc harmonics (2 to 8.4 GHz class) for improved dynamic range versus the +13 dBm 83525A. Broadband RF/microwave scalar testing needing cleaner harmonics to 8.4 GHz; swept amplifier/filter characterization; CW stimulus; ATE with programmable power and Option 002 attenuator. The HP 83525B covers 10 MHz (0.01 GHz) to 8.4 GHz in an 8350-series mainframe by PIN-switching heterodyne low band (0.01 to 2.1 GHz) with a 2 to 8.4 GHz YIG high band. Frequency accuracy and linearity match the 83525A family. Maximum leveled power is +10 dBm with greater than 45 dBc harmonics (2 to 8.4 GHz class) for improved dynamic range versus the +13 dBm 83525A. Broadband RF/microwave scalar testing needing cleaner harmonics to 8.4 GHz; swept amplifier/filter characterization; CW stimulus; ATE with programmable power and Option 002 attenuator.



MODEL

**HP / Agilent
83525B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

83525B

LISTING

<https://aumictechlabs.com/products/83525b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The HP/Agilent 83525B is an RF plug-in module engineered for low-harmonic signal generation across 0.01 to 8.4 GHz. Designed for integration into compatible HP/Agilent signal generator mainframes, this plug-in delivers spectrally pure RF output critical for precise component and system characterization. The 83525B minimizes harmonic distortion, making it ideal for demanding test applications where signal integrity directly impacts measurement accuracy. As a plug-in architecture component, it pairs with host mainframes to provide stable, low-distortion RF signal sourcing for research, development, and manufacturing test environments.

Technical Specifications

Frequency Range Start: 0.01 GHz (10 MHz) Stop: 8.4 GHz

Output Characteristics

Low harmonic distortion performance optimized for spectral purity RF Output The module provides stable RF signal output. Output power levels and leveling accuracy are determined by the host signal generator chassis specifications.

Key Features

- Broad frequency coverage from 10 MHz to 8.4 GHz
- Minimized harmonic content for signal purity-critical applications
- Plug-in module architecture for mainframe integration
- Stable RF output delivery across full frequency range

Typical Applications

- RF component characterization and testing
- System-level RF validation
- Signal integrity verification in research and development
- Advanced manufacturing test environments requiring spectral purity

Compatibility & Integration

The 83525B works with installation into compatible HP/Agilent signal generator mainframes supporting plug-in architecture. Common compatible hosts include the 8340/8341/8350 series. Host mainframe specifications determine overall system output power, modulation capabilities, and electrical requirements. Compatibility verification against specific mainframe technical documentation is required before procurement.

Features & description

From manufacturer datasheet

Features

- 0.01 to 8.4 GHz with automatic band switching
- Low-harmonics sibling of 83525A (greater than 45 dBc class)
- +10 dBm maximum leveled power
- Crystal markers below 2 GHz
- Option 002 70 dB step attenuator; HP-IB via mainframe

83525B Characteristics / Specifications

PARAMETER	VALUE
Model	83525B
Manufacturer	Hewlett Packard / Agilent
Instrument Type	Sweep oscillator RF plug-in (requires 8350-series mainframe)
Frequency Range	0.01 to 8.4 GHz
Low Band	0.01 to 2.1 GHz
High Band	2.0 to 8.4 GHz
Internal Band Switch Point	2.0 to 2.1 GHz
Full Band Switch Discontinuity Typical	less than 8 MHz
Maximum Leveled Power	+10 dBm
Harmonics High Band	greater than 45 dBc (2 to 8.4 GHz class)
Internal Leveling Flatness Class	plus/minus 1 dB (shared 83525A/B family literature)
Low Band CW Accuracy	plus/minus 5 MHz
High Band CW Accuracy	plus/minus 8 MHz
Full Band Linearity	plus/minus 3 MHz
Low Band Linearity	plus/minus 2 MHz
Power Display Resolution	0.1 dB
Power Programmable Resolution	0.02 dB
Crystal Markers Below 2 GHz	10 and 50 MHz; 1 MHz below 1 GHz
RF Output Connector	TypeNfemale
Frequency Reference Output	1 V/GHz nominal
Net Weight	4.5 kg (10 lb)
Shipping Weight	7.7 kg (17 lb)
Related Higher Power Sibling	83525A +13 dBm (do not applyApower row to B)
Alias	HP 83525B; Agilent 83525B

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Power Display Resolution	0.1 dB
Power Programmable Resolution	0.02 dB
Option 002: programmable 70 dB step attenuator (10 dB steps)	
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Notes

Frequency and marker rows shared with 83525A/B catalog text; leveled power +10 dBm and greater than 45 dBc harmonics are the differentiators in HP 8350-series ordering/catalog literature. Verify Option 002/004 and installed mainframe.

Ordering Information

OPTION	DESCRIPTION
Option 002	attenuator.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
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NIST-traceable calibration · SAM registered ·
30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.