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Data Sheet
August 13, 2026

AGILENT

Agilent 83752A 20 GHz Synthesized Sweeper

Agilent 83752A Synthesized Sweeper, 10 MHz to 20 GHz The Agilent (HP) 83752A is the standard-power member of the 83751/83752 synthesized sweeper family, covering 10 MHz to 20 GHz with fully synthesized CW, stepped, and ramp (analog phase-locked) sweep. Maximum leveled power is +10 dBm (25 plus/minus 5 C). TheBsuffix (83752B) is the high-power sibling. The 83752A is intended for scalar and general RF/microwave stimulus with 8757-series analyzers and asasynthesized replacement for open-loop sweepers. The Agilent (HP) 83752A is the standard-power member of the 83751/83752 synthesized sweeper family, covering 10 MHz to 20 GHz with fully synthesized CW, stepped, and ramp (analog phase-locked) sweep. Maximum leveled power is +10 dBm (25 plus/minus 5 C). TheBsuffix (83752B) is the high-power sibling. The 83752A is intended for scalar and general RF/microwave stimulus with 8757-series analyzers and asasynthesized replacement for open-loop sweepers. Scalar network analysis with 8757A/C/D/E; broadband and narrowband component characterization; ATE stimulus; noise-figure system source with 8970B; general 10 MHz to 20 GHz CW and swept generation.

MODEL **Agilent 83752A**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **83752A**	LISTING **https://aumictechlabs.com/products/83752a-2/**

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent 83752A 20 GHz Synthesized Sweeper is a signal source engineered for RF and microwave testing across 10 MHz to 20 GHz. It delivers synthesized precision with 1 Hz CW

resolution and supports multiple sweep modes - stepped, ramp (phase-locked), marker, and alternate - enabling rapid device characterization. Maximum leveled output reaches +10 dBm with 0.01 dB power resolution and ±1.0 dB accuracy above –10 dBm. Frequency switching completes in 70 ms CW mode; stepped sweep points switch in 7 ms plus 8 ms/GHz. Ramp sweeps span 10 ms to 100 s at up to 400 MHz/ms, with accuracy to ±0.01% of span ±75 kHz for 100 ms sweeps. Standard timebase stability is ±10 ppm; optional high-stability timebase (1E5) achieves 5 × 10^{-10}/day aging and 1 × 10^{-10}/°C temperature coefficient. Harmonic content measures –45 dBc (–30 dBc below 1.5 GHz); non-harmonic spurious suppression reaches –50 dBc. Power flatness within the –10 dBm region is ±0.7 dB; source match is typically –10 dBm) Power Flatness: ±0.7 dB (> –10 dBm) Power Slope: ±2 dB/GHz, 25 dB max; Power Sweep Range: 25 dB Harmonics: –45 dBc (–30 dBc < 1.5 GHz) Non-Harmonic Spurious: –50 dBc Source Match: < 1.7:1 SWR typical Key Features Marker and alternate sweep modes for flexible test sequences Phase-locked ramp sweep with linear frequency sweep control Optional high-stability timebase for demanding metrology applications Settable power slope across frequency range Typical Applications Broadband component characterization RF/microwave system development and validation Radar system calibration Compatibility & Integration Option 1E1 adds 70 dB step attenuator; Option 1E5 upgrades timebase stability.

83752A Characteristics / Specifications

PARAMETER	VALUE
Model	83752A
Manufacturer	Hewlett-Packard / Agilent / Keysight
Instrument Type	Synthesized sweeper (standard power)
Alias	HP 83752A; Agilent 83752A; Keysight 83752A
Frequency Range	10 MHz to 20 GHz
CW Resolution	1 Hz
CW Switching Time	70 ms maximum
Stepped Sweep Points	2 to 1601
Stepped Sweep Switching Typical	7 ms + 8 ms/GHz step (up to 50 ms at the 2 GHz band switch)
Ramp Sweep Time	10 ms to 100 s; 400 MHz/ms maximum
Ramp Sweep Resolution	1 kHz
Timebase Standard	plus/minus 10 ppm class
Timebase Option 1E	aging 5e-10/day, 1e-7/year
Maximum Leveled Power	+10 dBm (25 plus/minus 5 C); reduce 1 dB with Option 1E1
Minimum Settable Power	-15 dBm; -85 dBm with Option 1E1
Power Resolution	0.01 dB settable
Power Accuracy Above minus 10 dBm	plus/minus 1.0 dB (83752A)
Power Flatness Above minus 10 dBm	plus/minus 0.7 dB (83752A)
Power Sweep Range	25 dB per sweep
Power Slope Range	0 to plus/minus 2 dB/GHz, 25 dB maximum
Source Match Typical	less than 1.7:1 SWR, internally leveled
Harmonics 10 MHz to 1.5 GHz	-30 dBc at max leveled power
Harmonics 1.5 to 20 GHz	-45 dBc at max leveled power
Subharmonics	none
Nonharmonic Spurious	-50 dBc (spurs greater than 500 kHz from carrier)

PARAMETER	VALUE
Pulse On Off Ratio	60 dB
Pulse Rise Fall 0.5 to 2 GHz	15 ns
Pulse Rise Fall 2 to 20 GHz	100 ns rise, 50 ns fall
Internal Square Wave	1.0 kHz and 27.8 kHz (scalar mode)
RF Connector Standard	precision 3.5 mm male
RF Connector Option 1ED	Type-N
Dimensions	133 × 425 × 483 mm (5.25 × 16.75 × 19 in) family chassis
Weight	about 16 kg (35 lb) family
Mains	90 to 132 Vac or 198 to 264 Vac; 400 VA maximum
Operating Temperature	0 to 55 C
Warm Up	30 minutes from cold start
Sibling High Power Model	83752B, +16 dBm below 2 GHz and +17 dBm above 2 GHz Notes Specs from Agilent 83751A/B and 83752A/B Synthesized Sweepers data sheet. This file is the standard-power 83752A, not the 83752B. Confirm Option 1E1 attenuator, 1E5 timebase, and RF connector (3.5 mm vs Type-N) on the unit.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 to 55 C
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Sibling High Power Model	83752B, +16 dBm below 2 GHz and +17 dBm above 2 GHz Notes Specs from Agilent 83751A/B and 83752A/B Synthesized Sweepers data sheet. This file is the standard-power 83752A, not the 83752B. Confirm Option 1E1 attenuator, 1E5 timebase, and RF connector (3.5 mm vs Type-N) on the unit.

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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Ramp Sweep Time	10 ms to 100 s; 400 MHz/ms maximum
Ramp Sweep Resolution	1 kHz
Timebase Standard	plus/minus 10 ppm class
Timebase Option 1E5	aging 5e-10/day, 1e-7/year
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Power Accuracy Above minus 10 dBm	plus/minus 1.0 dB (83752A)
Power Flatness Above minus 10 dBm	plus/minus 0.7 dB (83752A)
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Source Match Typical	less than 1.7:1 SWR, internally leveled
Harmonics 10 MHz to 1.5 GHz	-30 dBc at max leveled power
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Subharmonics	none
Nonharmonic Spurious	-50 dBc (spurs greater than 500 kHz from carrier)
Pulse On Off Ratio	60 dB

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Pulse Rise Fall 0.5 to 2 GHz	15 ns
Pulse Rise Fall 2 to 20 GHz	100 ns rise, 50 ns fall
Internal Square Wave	1.0 kHz and 27.8 kHz (scalar mode)
RF Connector Standard	precision 3.5 mm male
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Notes
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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
sales@aumictech.com · +1 (484) 841-9341
https://aumictechlabs.com

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