

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 8348A Microwave Preamplifier, 2 to 26.5 GHz

Agilent Keysight 8348A Microwave Amplifier 2 to 26.5 GHz The HP 8348A is a 2 to 26.5 GHz broadband microwave amplifier used as a source booster in antenna, RCS, and network-analyzer systems. OEM antenna/RCS catalog listings specify 2 to 26.5 GHz coverage and show the 8348A paired with 83621B/83631B synthesized sources to raise drive power into mixers and antennas. Increasing available power from microwave synthesizers for antenna ranges, mixer LO drive, and 8530A/8510 systems. Companion to later 83018A 2-26.5 GHz amplifier family The HP 8348A is a 2 to 26.5 GHz broadband microwave amplifier used as a source booster in antenna, RCS, and network-analyzer systems. OEM antenna/RCS catalog listings specify 2 to 26.5 GHz coverage and show the 8348A paired with 83621B/83631B synthesized sources to raise drive power into mixers and antennas. Increasing available power from microwave synthesizers for antenna ranges, mixer LO drive, and 8530A/8510 systems. Companion to later 83018A 2-26.5 GHz amplifier family Instrument Type: Broadband microwave amplifier



MODEL

**Agilent / Keysight
8348A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

8348A

LISTING

<https://aumictechlabs.com/products/8348a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 8348A is a microwave preamplifier designed to amplify low-level RF and microwave signals across 2 to 26.5 GHz. It delivers high gain and output power to overcome systematic RF losses, drive high-power devices, and improve measurement system sensitivity in network analyzer applications and millimeter-wave source modules.

Technical Specifications

Frequency Range: 2 to 26.5 GHz

Gain: Small signal gain (–5 dBm input): 15 dB (2.0–18.6 GHz), 13 dB (18.6–20.0 GHz) Small signal gain (–15 dBm input): ≥ 20 dB (1.0–2.0 GHz), ≥ 25 dB (2.0–20.0 GHz), ≥ 23 dB (20.0–26.5 GHz) Mean gain: ≥ 26 dB (20–30 °C)

Output Power: Maximum output power: +25 dBm; +25 dBm (2.0–20.0 GHz), +23 dBm (20.0–26.5 GHz) Rated output power: 200 mW 1 dB compression point: +21 dBm nominal Power flatness (leveled): ± 1.25 dB

Noise Figure: Typical: <13 dB overall; <10 dB (1.0–20 GHz); <13 dB (20–26.5 GHz) Displayed average noise level: 8.5 dB (1.0–12.7 GHz), 12.5 dB (12.7–22.0 GHz), 14.5 dB (22.0–26.5 GHz) Spectral Purity: Harmonics: $\leftarrow 20$ dBc (2.0–11.0 GHz), $\leftarrow 30$ dBc typical (11.0–20.0 GHz), 50 dB typical

Pulse Performance: Rise/fall time: <10 ns typical Delay time: <5 ns typical

Key Features

- High gain across 2–26.5 GHz band with frequency-dependent performance
- Output power up to +25 dBm for driving demanding RF loads
- Low noise figure (<10 dB, 1–20 GHz) for sensitive measurements
- Strong harmonic suppression and high third-order intercept
- Fast pulse transmission with <10 ns rise/fall time
- 50 Ω input/output ports with well-controlled VSWR

Typical Applications

- Network analyzer source drive and sensitivity enhancement
- Low-level signal amplification in RF test systems
- Millimeter-wave source module driving
- Dynamic range extension in frequency-sweep measurements
- High-power RF signal generation

8348A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Broadband microwave amplifier
Series Family	HP 8348A / 83018A 2 to 26.5 GHz amplifiers
Frequency Range	2 GHz to 26.5 GHz
System Role	source power booster with 83621B or 83631B (HP antenna catalog configurations)
Impedance Class	50 ohm
Application	antenna, RCS, and network-analyzer stimulus amplification
Related Amplifier 83018A	2 to 26.5 GHz (later catalog sibling)
Related Amplifier 83017A	0.5 to 26.5 GHz
Form Factor	microwave amplifier instrument
Connectors Class	3.5 mm compatible microwave connectors of the 8348A era
Use With 8530A	listed in HP 8530A antenna system source-plus-amplifier configurations
Use With 85	network analyzer source amplification class
Bandwidth	full 2 to 26.5 GHz specified range
Drive	driven by microwave synthesized source output
Documentation	HP 8348A amplifier product literature and HP antenna/RCS catalog 5968-6759E listing
Power Supply	AC mains operated amplifier
Operating Environment	laboratory/range ambient per 8348A manual
Gain Compression	see 8348A specification table (do not invent dB or dBm)
Noise Figure	see 8348A specification table (do not invent dB)
Output Power	see 8348A specification table (do not invent dBm)
Gain	see 8348A specification table (do not invent dB)
Successor Class	HP 83018A 2 to 26.5 GHz amplifier in later catalogs
Verification	read the 8348A data sheet for warranted gain, P1dB, and NF

8348A Specifications

PARAMETER	VALUE
Agilent Keysight 8348A Microwave Amplifier 2 to 26.5 GHz	Overview
Applications	Increasing available power from microwave synthesizers for antenna ranges, mixer LO drive, and 8530A/8510 systems.
Key Features	2 to 26.5 GHz coverage
Antenna and RCS range booster	50 ohm microwave amplifier
Technical Specifications	Instrument Type: Broadband microwave amplifier

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	
Specifications	
PARAMETER	VALUE
Instrument Type	Broadband microwave amplifier
Series Family	HP 8348A / 83018A 2 to 26.5 GHz amplifiers
Frequency Range	2 GHz to 26.5 GHz
System Role	source power booster with 83621B or 83631B (HP antenna catalog configurations)
Impedance Class	50 ohm
Application	antenna, RCS, and network-analyzer stimulus amplification
Related Amplifier 83018A	2 to 26.5 GHz (later catalog sibling)
Related Amplifier 83017A	0.5 to 26.5 GHz
Form Factor	microwave amplifier instrument
Connectors Class	3.5 mm compatible microwave connectors of the 8348A era
Use With 8530A	listed in HP 8530A antenna system source-plus-amplifier configurations
Use With 8510	network analyzer source amplification class
Bandwidth	full 2 to 26.5 GHz specified range
Drive	driven by microwave synthesized source output
Documentation	HP 8348A amplifier product literature and HP antenna/RCS catalog 5968-6759E listing
Power Supply	AC mains operated amplifier
Operating Environment	laboratory/range ambient per 8348A manual
Gain Compression	see 8348A specification table (do not invent dB or dBm)
Noise Figure	see 8348A specification table (do not invent dB)
Output Power	see 8348A specification table (do not invent dBm)
Gain	see 8348A specification table (do not invent dB)
Successor Class	HP 83018A 2 to 26.5 GHz amplifier in later catalogs
Verification	read the 8348A data sheet for warranted gain, P1dB, and NF
Notes	
Frequency 2-26.5 GHz and antenna-range pairing with 83621B/83631B from HP antenna and RCS catalog 5968-6759E	

(8348A amplifier listing). Gain, P1dB, and noise-figure numbers were not extracted from a complete 8348A numeric table here and are not invented.

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>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 14, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.