Aumictech
Test & measurement · bought, sold, repaired, calibrated

Data Sheet
August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 8349B Microwave Amplifier, 2 to 20 GHz

The HP 8349B isamicrowave amplifier covering 2 GHz to 20 GHz. OEM specifications list approximately 15 dB gain, useful output power for microwave stimulus chains, and 50 Ohm Type-N or APC-3.5 class interfaces depending on configuration. Microwave signal amplification to 20 GHz, overcoming cable and fixture losses, and driving mixers or antennas in microwave test setups. Gain Flatness Class: plus or minus 2 dB class OEM sheet Output Power At 1 dB Compression Class: greater than plus 18 dBm class midband Harmonic Output Class: specified on OEM sheet Calibration: Factory gain characterization Weight Class: benchtop amplifier class sheet From HP 8349B microwave amplifier data sheet. Frequency-dependent gain, power, and VSWR rows are on the OEM table for the calibrated unit.

MODEL **Agilent / Keysight 8349B**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **8349B**	LISTING **https://aumictechlabs.com/products/8349b-2/**

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

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 8349B is a broadband microwave power amplifier delivering 2 to 20 GHz signal amplification for test, measurement, and signal generation applications. Designed for communications, radar, and electronic warfare systems, the 8349B provides consistent gain and output power across its operating range with selectable leveled and unleveled output modes.Technical Specifications Frequency Range: 2 to 20 GHz Gain 2.0 to 18.6 GHz: ≥15 dB

minimum small signal gain (at –5 dBm input) 18.6 to 20.0 GHz: ≥13 dB minimum small signal gain Typical: 22 dB Output Power (at +5 dBm input) 2.0 to 18.6 GHz leveled: +19 dBm (80 mW) minimum 2.0 to 18.6 GHz unleveled: +20 dBm (100 mW) minimum 18.6 to 20.0 GHz leveled: +17 dBm (50 mW) minimum 18.6 to 20.0 GHz unleveled: +18 dBm (63 mW) minimum 1 dB compression point: +21 dBm nominal Power Flatness (Leveled): ±1.25 dB Noise Figure: 8.5 dB typical Impedance: 50 Ω nominal (input and output) VSWR Input leveled: ≤2.8 Output leveled: ≤2.5 Output unleveled: ≤4.8 (2.0–5.0 GHz) to ≤3.2 (11.0–20.0 GHz) Spectral Purity Harmonics: ←20 dBc (2.0–11.0 GHz); 50 dB typical Pulse Performance: Rise/fall time <10 ns typical; delay <8 ns typical Maximum Continuous Input: +27 dBm RFKey Features Dual-mode operation: leveled output for dynamic range enhancement; unleveled for maximum power Precision Type-N female connectors (input and output) Fast pulse response supporting <10 ns rise/fall times High reverse isolation enabling use in bidirectional test setups AC power: 100, 120, 220, or 240 VAC, 48–66 HzPhysical Dimensions: 133 mm (H) × 214 mm (W) × 366 mm (D) Weight: 7.3 kg (16 lbs) netTypical Applications Network analyzer drive and receiver amplification Microwave power generation for radar and EW signal sources Low-noise preamplification in receiver chains High-power signal conditioning across X-, Ku-, and K-band frequencies

8349B Characteristics / Specifications

PARAMETER	VALUE
Frequency Range	2 GHz to 20 GHz
Gain Typical	15 dB
Gain Flatness Class	plus or minus 2 dB class OEM sheet
Output Power At 1 dB Compression Class	greater than plus 18 dBm class midband
Input Impedance	50 Ohm
Output Impedance	50 Ohm
VSWR Class	less than 2.5:1 class
Maximum Input Power Class	damage limit on OEM sheet
Connector Type Class	TypeNor APC 3.5 class
Instrument Type	Microwave amplifier
Form Factor	Benchtop
Operating Temperature Class	0 C to 55 C
Power Line	100/120/220/240 V class
Noise Figure Class	specified on OEM sheet
Reverse Isolation Class	specified on OEM sheet
Series Family	HP 834x microwave amplifiers
Minimum Frequency	2 GHz
Maximum Frequency	20 GHz
Harmonic Output Class	specified on OEM sheet
Spurious Class	specified on OEM sheet
Calibration	Factory gain characterization
Weight Class	benchtop amplifier class sheet
Operating temperature	Class: 0 C to 55 C

8349B Specifications

PARAMETER	VALUE
HP Agilent 8349B Microwave Amplifier	Overview
Applications	Microwave signal amplification to 20 GHz, overcoming cable and fixture losses, and driving mixers or antennas in microwave test setups.
Key Features	2 GHz to 20 GHz coverage
Microwave power amplification	50 Ohm matched path
Technical Specifications	Frequency Range: 2 GHz to 20 GHz
Notes	From HP 8349B microwave amplifier data sheet. Frequency-dependent gain, power, and VSWR rows are on the OEM table for the calibrated unit.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: 0 C to 55 C
Operating Temperature	Class: 0 C to 55 C
Operating Temperature Class	0 C to 55 C
Power Line	100/120/220/240 V class
Noise Figure Class	specified on OEM sheet
Reverse Isolation Class	specified on OEM sheet
Series Family	HP 834x microwave amplifiers
Minimum Frequency	2 GHz
Maximum Frequency	20 GHz
Harmonic Output Class	specified on OEM sheet
Spurious Class	specified on OEM sheet
Calibration	Factory gain characterization
Weight Class	benchtop amplifier class sheet Notes From HP 8349B microwave amplifier data sheet. Frequency-dependent gain, power, and VSWR rows are on the OEM table for the calibrated 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 list approximately 15 dB gain, useful output power for microwave stimulus chains, and 50 Ohm Type-N or APC-3.5 class interfaces depending on configuration.

Applications
Microwave signal amplification to 20 GHz, overcoming cable and fixture losses, and driving mixers or antennas in microwave test setups.

Key Features
2 GHz to 20 GHz coverage
Approximately 15 dB gain
Microwave power amplification
50 Ohm matched path
Benchtop packaged amplifier

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Frequency Range	2 GHz to 20 GHz
Gain Typical	15 dB
Gain Flatness Class	plus or minus 2 dB class OEM sheet
Output Power At 1 dB Compression Class	greater than plus 18 dBm class midband
Input Impedance	50 Ohm
Output Impedance	50 Ohm
VSWR Class	less than 2.5:1 class
Maximum Input Power Class	damage limit on OEM sheet
Connector Type Class	TypeNor APC 3.5 class
Instrument Type	Microwave amplifier
Form Factor	Benchtop
Operating Temperature Class	0 C to 55 C
Power Line	100/120/220/240 V class
Noise Figure Class	specified on OEM sheet
Reverse Isolation Class	specified on OEM sheet
Series Family	HP 834x microwave amplifiers
Minimum Frequency	2 GHz
Maximum Frequency	20 GHz
Harmonic Output Class	specified on OEM sheet
Spurious Class	specified on OEM sheet

PARAMETER	VALUE
Calibration	Factory gain characterization
Weight Class	benchtop amplifier class sheet

Notes
From HP 8349B microwave amplifier data sheet. Frequency-dependent gain, power, and VSWR rows are on the OEM table for the calibrated unit.

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