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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 8447F

The HP 8447F combines dual-channel preamplifier functions covering low-frequency through UHF bands in one package. OEM family literature lists two amplifier sections with approximately 20 dB class gain for flexible RF front-end configurations. Dual-path RF preamplification, multi-channel analyzer front ends, and general lab RF gain to UHF frequencies. Frequency Range Class: 100 kHz to 1.3 GHz class family coverage Gain Typical Per Channel Class: 20 dB to 25 dB class section dependent Reverse Isolation Class: specified on OEM sheet Channel Isolation Class: specified on OEM sheet Calibration: Factory gain characterization From HP 8447F dual preamplifier product literature. Section-specific frequency and gain rows are on the OEM data sheet for each amplifier path.



MODEL

**Agilent / Keysight
8447F**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

8447F

LISTING

<https://aumictechlabs.com/products/8447f-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 8447F is a dual-channel RF amplifier combining preamplifier and power amplifier functionality in a single instrument. Engineered with thin-film hybrid integrated circuits, it delivers stable gain across a broad frequency spectrum to enhance measurement system sensitivity, extend dynamic range, and drive high-power loads. Technical Specifications Frequency Range Standard configuration: 0.1 MHz to 1.3 GHz With Option H64: 9 kHz to 1.3 GHz Channel 1 (Option H64): 9 kHz to 50 MHz Channel 2 (Option H64): 100 kHz to 1.3 GHz Gain Performance Preamplifier channel: 25 dB minimum (100 kHz to 1.3 GHz) or 26 dB minimum (9 kHz to 50 MHz)

Power amplifier channel: 22 dB $\pm$ 1.5 dB (100 kHz to 1.3 GHz) Cascaded gain: Up to 47–48 dB Gain flatness: $\pm$ 1.5 dB across full frequency range Signal Quality Noise figure: 40 dB Output power (1 dB compression): $\geq$ +12.5 dBm (0.1 to 1000 MHz) Impedance: 50 Ω Power Requirements Input voltage: 110 or 230 V ac $\pm$ 10% Frequency: 48–440 Hz Power consumption: 27 VA maximum

Key Features Dual independent channels for simultaneous amplification or cascaded operation Low noise figure enables detection of weak signals High reverse isolation prevents load pulling and improves measurement accuracy Maximum DC voltage tolerance: $\pm$ 10 V Standard 50 Ω BNC (female) connectors; optional N-type connectors available

Typical Applications Expanding dynamic range of network analyzers and RF test systems Preamplification of low-level signals in receivers and sensors Driver amplification for transmitter and power amplifier testing EMC emissions and precompliance testing Signal generation systems requiring increased output power

Compatibility & Integration Connector options accommodate various system architectures. Standard BNC configuration interfaces with laboratory instrumentation; optional N-type connectors (Options 010 and 011) support high-frequency cabling requirements. Compact form factor integrates into benchtop and automated test setups.

8447F Characteristics / Specifications

PARAMETER	VALUE
Frequency Range Class	100 kHz to 1.3 GHz class family coverage
Gain Typical Per Channel Class	20 dB to 25 dB class section dependent
Channel Count	2
Noise Figure Class	low noise preamp class midband
Output Power At 1 dB Compression Class	greater than plus 6 dBm class
Input Impedance	50 Ohm
Output Impedance	50 Ohm
VSWR Class	less than 2.0:1 class
Connector Type Class	TypeNor BNC section dependent
Instrument Type	Dual preamplifier
Form Factor	Benchtop
Operating Temperature Class	0 C to 55 C
Power Line	100/120/220/240 V class
Gain Flatness Class	plus or minus 1.5 dB class
Maximum Input Power Class	damage limit on OEM sheet
Series Family	HP 8447 amplifiers
Minimum Frequency Class	100 kHz
Maximum Frequency Class	1.3 GHz
Reverse Isolation Class	specified on OEM sheet
Channel Isolation Class	specified on OEM sheet
Calibration	Factory gain characterization
Weight Class	dual amplifier class sheet
Operating temperature	Class: 0 C to 55 C

8447F Specifications

PARAMETER	VALUE
HP Agilent 8447F Dual Preamp Amplifier	Overview
Dual preamplifier channels	Broadband RF coverage into UHF
Approximately 20 dB class gain per path	50 Ohm interfaces
Technical Specifications	Frequency Range Class: 100 kHz to 1.3 GHz class family coverage

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: 0 C to 55 C
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Series Family	HP 8447 amplifiers
Minimum Frequency Class	100 kHz
Maximum Frequency Class	1.3 GHz
Reverse Isolation Class	specified on OEM sheet
Channel Isolation Class	specified on OEM sheet
Calibration	Factory gain characterization
Weight Class	dual amplifier class sheet Notes From HP 8447F dual preamplifier product literature. Section-specific frequency and gain rows are on the OEM data sheet for each amplifier path.

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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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

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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.