

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 87415A

Agilent 87415A Microwave System Amplifier 2 to 8 GHz The Keysight/Agilent 87415A is a compact 2 to 8 GHz microwave system amplifier. OEM RF and Microwave Amplifiers fact sheet lists 25 dB minimum gain, 23 dBm P1dB at 8 GHz, 26 dBm Psat at 8 GHz, 13 dB typical noise figure at 8 GHz, VSWR 3, 60 dB isolation, and +12 V at 900 mA with SMA female connectors. Loss compensation, preamplification, and remotely located gain staging in microwave test systems, powered by the 87421A supply. Instrument Type: Microwave system amplifier The Keysight/Agilent 87415A is a compact 2 to 8 GHz microwave system amplifier. OEM RF and Microwave Amplifiers fact sheet lists 25 dB minimum gain, 23 dBm P1dB at 8 GHz, 26 dBm Psat at 8 GHz, 13 dB typical noise figure at 8 GHz, VSWR 3, 60 dB isolation, and +12 V at 900 mA with SMA female connectors. Loss compensation, preamplification, and remotely located gain staging in microwave test systems, powered by the 87421A supply. Instrument Type: Microwave system amplifier Output Power P1db At 8 GHz: 23 dBm at 8 GHz



MODEL

**Agilent / Keysight
87415A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

87415A

LISTING

<https://aumictechlabs.com/products/87415a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 87415A is a microwave system amplifier that delivers 25 dB minimum gain across 2 GHz to 8 GHz, compensating for system losses and boosting available power at the test port in RF and microwave ATE systems. Built on GaAs MMIC technology with internal bias regulation and integral heat sinking, the 87415A operates as a stand-alone gain block suitable for

integration into diverse test configurations. Technical Specifications Frequency Range: 2 GHz to 8 GHz Gain: 25 dB minimum (small signal); ± 3 dB maximum gain flatness Output Power: 23 dBm at 1 dB compression point; +26 dBm at saturation Noise Figure: 13 dB typical Input SWR: 2:1 Output SWR: 3.6:1 (2–2.5 GHz); 3:1 (2.5–8 GHz) Harmonics: -20 dBc at +23 dBm output Bias Requirements: +12 V dc nominal (11–13 V dc range); 900 mA nominal Key Features GaAs MMIC technology for reliability and gain block performance Integral heat sink for thermal management in compact form factor Internal bias regulation with dedicated bias port for external power supply connection RF connectors: 2.4 mm female Net weight: 0.64 kg Typical Applications The 87415A functions as a system-level amplifier in RF and microwave ATE systems, recovering insertion losses and extending available power margins at measurement points. Ideal for gain block integration where compact size and integrated thermal management are required. Compatibility & Integration Compatible with the Agilent/Keysight 87421A 25 W Power Supply for standalone operation. Bias port cabling accommodates direct connection to external +12 V dc regulated sources within the specified voltage and current range.

87415A Characteristics / Specifications

PARAMETER	VALUE
Model	87415A
Instrument Type	Microwave system amplifier
Frequency Range	2 to 8 GHz
Gain Minimum	25 dB
Output Power P1db At 8 Ghz	23 dBm at 8 GHz
Output Power Psat At 8 Ghz	26 dBm at 8 GHz
Noise Figure Typical At 8 Ghz	13 dB at 8 GHz typical
Vswr	3
Isolation	60 dB
Bias	+12 V at 900 mA
Rf Connectors	SMA female
Recommended Power Supply	Keysight 87421A, 25 W plus or minus 12 V
Supply Cable	2 m cable 83006-60005 class for 87421A to 87415A/83006A/83017A/83018A
Related Supply 87421A Plus 12 V	+12 V at 2 A on 87421A
Related Supply 87421A Minus 12 V	minus 12 V at 200 mA on 87421A
Related Supply 87421A Power	25 W
Related Supply 87421A Line Regulation	0.1 percent
Related Supply 87421A Load Regulation	2.0 percent (20 percent to full load)
Related Supply 87421A Ripple	25 mV rms max
Related Supply 87421A Ac Input	90 to 250 Vac, 50/60 Hz
Topology Class	GaAs MMIC system amplifier with internal bias regulation on product descriptions
Form Factor	compact remote system amplifier

87415A Specifications

PARAMETER	VALUE
Agilent 87415A Microwave System Amplifier 2 to 8 GHz	Overview
Applications	Loss compensation, preamplification, and remotely located gain staging in microwave test systems, powered by the 87421A supply.
Key Features	2 to 8 GHz octave-band system amplifier
Technical Specifications	Model: 87415A

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
Model	87415A
Instrument Type	Microwave system amplifier
Frequency Range	2 to 8 GHz
Gain Minimum	25 dB
Output Power P1db At 8 Ghz	23 dBm at 8 GHz
Output Power Psat At 8 Ghz	26 dBm at 8 GHz
Noise Figure Typical At 8 Ghz	13 dB at 8 GHz typical
Vswr	3
Isolation	60 dB
Bias	+12 V at 900 mA
Rf Connectors	SMA female
Recommended Power Supply	Keysight 87421A, 25 W plus or minus 12 V
Supply Cable	2 m cable 83006-60005 class for 87421A to 87415A/83006A/83017A/83018A
Related Supply 87421A Plus 12 V	+12 V at 2 A on 87421A
Related Supply 87421A Minus 12 V	minus 12 V at 200 mA on 87421A
Related Supply 87421A Power	25 W
Related Supply 87421A Line Regulation	0.1 percent
Related Supply 87421A Load Regulation	2.0 percent (20 percent to full load)
Related Supply 87421A Ripple	25 mV rms max
Related Supply 87421A Ac Input	90 to 250 Vac, 50/60 Hz
Topology Class	GaAs MMIC system amplifier with internal bias regulation on product descriptions
Form Factor	compact remote system amplifier
Notes	
Amplifier rows from Keysight RF and Microwave Amplifiers Product Fact Sheet / Selection Guide 87415A column. 87421A supply rows are the published 87421A technical-overview column used to bias 87415A; they are the supply, not RF output of the 87415A.	

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.