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Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 86207A RF Bridge, 75 Ohm, 300 kHz to 3 GHz

Keysight 86207A 75 Ohm RF Bridge 300 kHz to 3 GHz The Keysight (HP/Agilent) 86207A is a high-directivity 75 ohm RF bridge for accurate reflection measurements and signal leveling from 300 kHz to 3 GHz. It combines broadband directional-bridge performance with low insertion loss and flat coupling factor for CATV and 75 ohm network analysis accessories. The Keysight (HP/Agilent) 86207A is a high-directivity 75 ohm RF bridge for accurate reflection measurements and signal leveling from 300 kHz to 3 GHz. It combines broadband directional-bridge performance with low insertion loss and flat coupling factor for CATV and 75 ohm network analysis accessories.



MODEL

**Agilent / Keysight
86207A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

86207A

LISTING

<https://aumictechlabs.com/products/86207a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 86207A is a 75 Ohm RF bridge for precision reflection measurements spanning 300 kHz to 3 GHz. High directivity across the operating band minimizes coupling between incident and reflected signals, delivering the impedance and reflection coefficient accuracy required for component and system characterization. This instrument integrates with vector network analyzers and RF test equipment to measure return loss and S11 parameters in 75 Ohm environments. The bridge's impedance matching performance - indicated by its VSWR

contribution - supports critical laboratory and field applications where measurement precision is essential. Technical Specifications Frequency Range: 300 kHz to 3 GHz Impedance: 75 Ohms nominal Directivity: High directivity across operating band VSWR: Bridge VSWR contributes to overall measurement accuracy; lower VSWR indicates better impedance match Maximum Input Power: Specified by design limits without damage or performance degradation Key Features High directivity performance minimizes signal coupling errors Calibrated reference plane for accurate de-embedding of cable and fixture effects 75 Ohm impedance matching for standard transmission line characterization Compact construction suitable for bench and integrated test setups Typical Applications 75 Ohm transmission line characterization Passive component testing (attenuators, filters, splitters) Active component measurement (amplifiers, modulators) Broadcast video and CATV system analysis Telecommunications and cable network impedance verification Return loss and reflection coefficient measurement Compatibility & Integration The 86207A operates with vector network analyzers and RF test instruments capable of S11 and return loss measurement. Standard RF connectors ensure compatibility with typical 75 Ohm test equipment and devices under test across the microwave and RF frequency bands.

Features & description

From manufacturer datasheet

Features

- Frequency range 300 kHz to 3 GHz
- 75 ohm nominal impedance
- TypeNfemale connectors
- Directivity up to 40 dB midband
- Coupling factor 16 dB plus 0.15 dB/GHz
- Insertion loss 1.5 dB plus 0.1 dB/GHz
- Maximum input power 25 dBm

Applications

- 75 ohm reflection and return-loss measurements
- Signal leveling and power monitoring on 75 ohm systems
- Scalar and vector analyzer reflection test setups
- ENA E5061/E5071 family accessory use

86207A Characteristics / Specifications

PARAMETER	VALUE
Model	86207A
Manufacturer	Keysight / Agilent / Hewlett Packard
Instrument Type	RF Directional Bridge
Alias	86207A; HP 86207A; Agilent 86207A
Frequency range	300 kHz to 3 GHz
Impedance	75 ohms nominal
Directivity 0.3 MHz to 5 MHz	30 dB minimum
Directivity 5 MHz to 1.3 GHz	40 dB minimum
Directivity 1.3 GHz to 2 GHz	35 dB typical
Directivity 2 GHz to 3 GHz	30 dB typical
Port match 0.3 GHz to 1.3 GHz	20 dB minimum (1.22 SWR)
Port match 1.3 GHz to 2 GHz	18 dB typical (1.29 SWR)
Port match 2 GHz to 3 GHz	18 dB typical (1.29 SWR)
Insertion loss	1.5 dB plus 0.1 dB/GHz
Insertion loss deviation	plus or minus 0.2 dB
Coupling factor below 3 GHz	16.0 dB plus 0.15 dB/GHz
Coupling factor above 3 GHz	16.5 dB minus 0.20 dB/GHz
Coupling factor deviation below 3 GHz	plus or minus 0.2 dB
Coupling factor deviation above 3 GHz	plus or minus 0.4 dB
Maximum input power	25 dBm
Maximum DC through arm	30 VDC 1 A
Maximum DC coupled arm	15 VDC
Connectors	TypeNfemale
Dimensions	160 W x 93 H x 23 mm D (6.3 × 3.7 × 1.0 in)
Weight net	0.57 kg (1.3 lb)

PARAMETER	VALUE
Weight shipping	1.80 kg (4.0 lb)
Operating temperature warranted	0 C to 55 C
Related 50 ohm bridge	86205A 86205B
Publication	Keysight 5091-3117E bridge datasheet Notes Specs from Keysight 86205A/B and 86207A RF Bridges datasheet 5091-3117E. Confirm connector gender and application impedance (75 ohm) on the unit.
Operating temperature	warranted: 0 C to 55 C

General Specifications & Supplementary Characteristics

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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.

performance with low insertion loss and flat coupling factor for CATV and 75 ohm network analysis accessories.

Applications

- 75 ohm reflection and return-loss measurements
- Signal leveling and power monitoring on 75 ohm systems
- Scalar and vector analyzer reflection test setups
- ENA E5061/E5071 family accessory use

Key Features

- Frequency range 300 kHz to 3 GHz
- 75 ohm nominal impedance TypeNfemale connectors
- Directivity up to 40 dB midband
- Coupling factor 16 dB plus 0.15 dB/GHz
- Insertion loss 1.5 dB plus 0.1 dB/GHz
- Maximum input power 25 dBm

Technical Specifications

Technical Specifications

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PARAMETER	VALUE
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Notes
Specs from Keysight 86205A/B and 86207A RF Bridges datasheet 5091-3117E. Confirm connector gender and application impedance (75 ohm) on the 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 ·
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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.