

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 12, 2026

HP / AGILENT

HP / Agilent 85027A Directional Bridge, 10 MHz to 18 GHz

The HP/Agilent 85027A Directional Bridge is a precision reflection measurement instrument engineered for scalar network analyzer systems operating from 10 MHz to 18 GHz. The device delivers 40 dB directivity and exceptional test port match, enabling accurate S-parameter characterization of microwave components across the full frequency band. Dual detection modes AC (modulated RF at 27.8 kHz) and DC (unmodulated RF) - accommodate both interference-rich environments and modulation-sensitive devices such as gain-controlled amplifiers. Compatibility & Integration Designed for operation with HP/Agilent scalar network analyzers: HP 8757: Supports AC and DC detection modes HP 8756: AC detection mode HP 8755: AC detection mode For SMA device measurements, use with 7 mm to 3.5 mm adapter (typical) across the 10 MHz to 18 GHz range. Aumictech offers NIST-traceable calibration and repair for the HP / Agilent 85027A. All calibrations are performed to NIST-traceable standards and ship with a certificate. Turnaround is typically 1–3 business days after receipt. This HP / Agilent 85027A is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units.



MODEL

**HP / Agilent
85027A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

85027A

LISTING

<https://aumictechlabs.com/products/85027a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The HP/Agilent 85027A Directional Bridge is a precision reflection measurement instrument engineered for scalar network analyzer systems operating from 10 MHz to 18 GHz. The device delivers 40 dB directivity and exceptional test port match, enabling accurate S-parameter characterization of microwave components across the full frequency band. Dual detection modes AC (modulated RF at 27.8 kHz) and DC (unmodulated RF) - accommodate both interference-rich environments and modulation-sensitive devices such as gain-controlled amplifiers.

Technical Specifications
Frequency Range: 10 MHz to 18 GHz
Impedance: 50 ohms
Directivity: Typically 40 dB
Test Port Match (SWR): 8.4 to 18 GHz specified for excellent match
Maximum Input Power: +23 dBm or +10 Volts
Input Connector: Type-N (female)
Test Port Connector: APC-7
Weight: 5 lb (shipping)

Key Features
AC detection mode: Modulated RF signal (27.8 kHz) for EMI-resistant measurements
DC detection mode: Unmodulated RF signal for modulation-sensitive component testing
High directivity ensures precise reflection measurements across the full bandwidth
Coaxial measurement capability to 18 GHz

Typical Applications
Return loss and reflection coefficient measurement
Microwave component and system characterization
S-parameter acquisition in scalar network analyzer setups
Testing of amplifiers and other gain-controlled circuits in DC mode
High-interference environment measurements in AC mode

Compatibility & Integration
Designed for operation with HP/Agilent scalar network analyzers:
HP 8757: Supports AC and DC detection modes
HP 8756: AC detection mode
HP 8755: AC detection mode
For SMA device measurements, use with 7 mm to 3.5 mm adapter (typical) across the 10 MHz to 18 GHz range.

Features & description

From manufacturer datasheet

Technical Specifications

Frequency Range: 10 MHz to 18 GHz Impedance: 50 ohms Directivity: Typically 40 dB Test Port Match (SWR): 8.4 to 18 GHz specified for excellent match Maximum Input Power: +23 dBm or +10 Volts Input Connector: Type-N (female) Test Port Connector: APC-7 Weight: 5 lb (shipping)

Key Features

AC detection mode: Modulated RF signal (27.8 kHz) for EMI-resistant measurements DC detection mode: Unmodulated RF signal for modulation-sensitive component testing High directivity ensures precise reflection measurements across the full bandwidth Coaxial measurement capability to 18 GHz

HP / Agilent 85027A — Repair & Calibration Service

Aumictech offers NIST-traceable calibration and repair for the HP / Agilent 85027A. All calibrations are performed to NIST-traceable standards and ship with a certificate. Turnaround is typically 1–3 business days after receipt. Standard Cal Pass/fail cert + NIST sticker Cal with Data Full NIST cert with measured values [Request Calibration](#) → [Request Repair Quote](#) →

HP / Agilent 85027A price

This HP / Agilent 85027A is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units.

HP / Agilent 85027A calibration cost

NIST-traceable calibration for the HP / Agilent 85027A is (standard — pass/fail certificate and calibration sticker) or (full measured data at every test point, reference standards documented, traceability chain included). Turnaround is 1 to 3 business days after receipt. See full calibration details →

Applications

Return loss and reflection coefficient measurement Microwave component and system characterization S-parameter acquisition in scalar network analyzer setups Testing of amplifiers and other gain-controlled circuits in DC mode High-interference environment measurements in AC mode Compatibility & Integration Designed for operation with HP/Agilent scalar network analyzers:HP 8757: Supports AC and DC detection modesHP 8756: AC detection modeHP 8755: AC detection mode For SMA device measurements, use with 7 mm to 3.5 mm adapter (typical) across the 10 MHz to 18 GHz range.

Unit notes

The HP/Agilent 85027A Directional Bridge is a precision reflection measurement instrument engineered for scalar network analyzer systems operating from 10 MHz to 18 GHz. The device delivers 40 dB directivity and exceptional test port match, enabling accurate S-parameter characterization of microwave components across the full frequency band. Dual detection modes AC (modulated RF at 27.8 kHz) and DC (unmodulated RF) - accommodate both interference-rich environments and modulation-sensitive devices such as gain-controlled amplifiers.

Technical Specifications

- Frequency Range: 10 MHz to 18 GHz
- Impedance: 50 ohms
- Directivity: Typically 40 dB
- Test Port Match (SWR): 8.4 to 18 GHz specified for excellent match
- Maximum Input Power: +23 dBm or +10 Volts
- Input Connector: Type-N (female)
- Test Port Connector: APC-7
- Weight: 5 lb (shipping)

Key Features

- AC detection mode: Modulated RF signal (27.8 kHz) for EMI-resistant measurements
- DC detection mode: Unmodulated RF signal for modulation-sensitive component testing
- High directivity ensures precise reflection measurements across the full bandwidth
- Coaxial measurement capability to 18 GHz

Typical Applications

- Return loss and reflection coefficient measurement
- Microwave component and system characterization
- S-parameter acquisition in scalar network analyzer setups
- Testing of amplifiers and other gain-controlled circuits in DC mode
- High-interference environment measurements in AC mode

Compatibility & Integration

Designed for operation with HP/Agilen

85027A Specifications

PARAMETER	VALUE
Frequency Range	10 MHz to 18 GHz Power Range (dBm): '+23 dBm Voltage / Current Range: '+10 Volts

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.

The HP/Agilent 85027A Directional Bridge is a precision reflection measurement instrument engineered for scalar network analyzer systems operating from 10 MHz to 18 GHz. The device delivers 40 dB directivity and exceptional test port match, enabling accurate S-parameter characterization of microwave components across the full frequency band. Dual detection modesAC (modulated RF at 27.8 kHz) and DC (unmodulated RF) - accommodate both interference-rich environments and modulation-sensitive devices such as gain-controlled amplifiers.

Compatibility & Integration Designed for operation with HP/Agilent scalar network analyzers:HP 8757: Supports AC and DC detection modesHP 8756: AC detection modeHP 8755: AC detection mode For SMA device measurements, use with 7 mm to 3.5 mm adapter (typical) across the 10 MHz to 18 GHz range.

Aumictech offers NIST-traceable calibration and repair for the HP / Agilent 85027A. All calibrations are performed to NIST-traceable standards and ship with a certificate. Turnaround is typically 1-3 business days after receipt.

This HP / Agilent 85027A is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units.

85027A Specifications

PARAMETER	VALUE
Frequency Range	10 MHz to 18 GHz Power Range (dBm): '+23 dBm Voltage / Current Range: '+10 Volts

Technical Specifications

Frequency Range: 10 MHz to 18 GHz Impedance: 50 ohms Directivity: Typically 40 dB Test Port Match (SWR): 8.4 to 18 GHz specified for excellent match Maximum Input Power: +23 dBm or +10 Volts Input Connector: Type-N (female) Test Port Connector: APC-7 Weight: 5 lb (shipping)

Key Features

AC detection mode: Modulated RF signal (27.8 kHz) for EMI-resistant measurements DC detection mode: Unmodulated RF signal for modulation-sensitive component testing High directivity ensures precise reflection measurements across the full bandwidth Coaxial measurement capability to 18 GHz

HP / Agilent 85027A – Repair & Calibration Service

Aumictech offers NIST-traceable calibration and repair for the HP / Agilent 85027A. All calibrations are performed to NIST-traceable standards and ship with a certificate. Turnaround is typically 1-3 business days after receipt.

Standard Cal Pass/fail cert + NIST sticker Cal with Data Full NIST cert with measured values

Request Calibration → Request Repair Quote →

HP / Agilent 85027A price

This HP / Agilent 85027A is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units.

HP / Agilent 85027A calibration cost

NIST-traceable calibration for the HP / Agilent 85027A is (standard – pass/fail certificate and calibration sticker) or (full measured data at every test point, reference standards documented, traceability chain included). Turnaround is 1 to 3 business days after receipt. See full calibration details →

Applications

Return loss and reflection coefficient measurement Microwave component and system characterization S-parameter acquisition in scalar network analyzer setups Testing of amplifiers and other gain-controlled circuits in DC mode High-interference environment measurements in AC mode

Compatibility & Integration Designed for operation with HP/Agilent scalar network analyzers:HP 8757: Supports AC and DC detection modesHP 8756: AC detection modeHP 8755: AC detection mode For SMA device measurements, use with 7 mm to 3.5 mm adapter (typical) across the 10 MHz to 18 GHz range.

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 12, 2026

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