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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 85027C

HP Agilent 85027C Directional Bridge 10 MHz to 18 GHz TypeN Overview The HP 85027C is a 50 ohm Type-N AC/DC directional bridge for 8757/8756/8755 scalar analyzers. OEM 85027 table lists 10 MHz to 18 GHz, Type-N female input and test port, 36 dB directivity to 12.4 GHz and 34 dB from 12.4 to 18 GHz. Swept reflection measurements on Type-N 50 ohm devices with HP 8757 AC or DC detection. Test Port Swr 0.01 To 8.4 Ghz: less than 1.15 The HP 85027C is a 50 ohm Type-N AC/DC directional bridge for 8757/8756/8755 scalar analyzers. OEM 85027 table lists 10 MHz to 18 GHz, Type-N female input and test port, 36 dB directivity to 12.4 GHz and 34 dB from 12.4 to 18 GHz. Swept reflection measurements on Type-N 50 ohm devices with HP 8757 AC or DC detection. Test Port Swr 0.01 To 8.4 Ghz: less than 1.15 Test Port Swr 8.4 To 12.4 Ghz: less than 1.25



MODEL

**Agilent / Keysight
85027C**

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

85027C

LISTING

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

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 85027C is a precision directional bridge for scalar reflection measurements across 10 MHz to 18 GHz. It couples incident and reflected signals from a device under test, enabling return loss characterization with high directivity and minimal test port loading. The bridge operates in AC or DC detection modes depending on the connected scalar network analyzer AC mode for noise-immune measurements, DC mode for modulation-sensitive devices. Technical Specifications Frequency Range: 10 MHz to 18 GHz Characteristic Impedance: 50 Ohms Connectors: Type N (female) at input and test port Directivity: 36 dB (10 MHz–12.4 GHz), 34 dB (12.4–18 GHz) Test Port Match (SWR): <1.15 (10 MHz–8.4

GHz), <1.25 (8.4–12.4 GHz), <1.43 (12.4–18 GHz) Typical Insertion Loss: 6.5 dB @ 10 MHz, 8.0 dB @ 18 GHz Minimum Input Power (40 dB Return Loss): +2 dBm @ 18 GHz Maximum Input Power: +23 dBm or +10 Volts Detection Modes: AC and DC (configurable) Dimensions: 26 mm (H) × 124 mm (W) × 118 mm (D) Weight: 0.5 kg net, 2.3 kg shipping

Key Features High directivity ensures accurate reflection measurements across the full frequency range Low test port SWR minimizes DUT loading errors Dual detection capability accommodates both noise-sensitive and DC-coupled measurement scenarios Compact package integrates into existing test benches Includes Type N shielded short, open, and m–m adapter

Typical Applications Return loss and reflection coefficient measurement Device impedance characterization Transmission measurements (with external power splitter and detectors) Component and filter validation at microwave frequencies

Compatibility & Integration Designed for Keysight 8757 series scalar network analyzers (AC/DC detection) and Keysight 8756/8755 series analyzers (AC detection mode). Ratio and transmission measurements require additional HP 85025 series (AC/DC) or HP 11664 series (AC only) detectors and a power splitter.

85027C Characteristics / Specifications

PARAMETER	VALUE
Model	85027C
Instrument Type	Directional bridge
Frequency Range	10 MHz to 18 GHz
Nominal Impedance	50 ohm
Input Connector	TypeNfemale
Test Port Connector	TypeNfemale
Directivity 0.01 To 12.4 Ghz	36 dB
Directivity 12.4 To 18 Ghz	34 dB
Test Port Swr 0.01 To 8.4 Ghz	less than 1.15
Test Port Swr 8.4 To 12.4 Ghz	less than 1.25
Test Port Swr 12.4 To 18 Ghz	less than 1.43
Host Analyzers Ac Dc	HP 8757
Host Analyzers Ac Only	HP 8756 and 8755
Detection Modes	AC or DC with 8757
Manufacturer	HP Agilent Keysight
Series Family	85027A/B/C/D/E
Minimum Frequency	10 MHz
Maximum Frequency	18 GHz
Bridge Type	high directivity scalar reflection bridge
Mechanical Package	coaxial directional bridge
Sibling 85027A	same 18 GHz range with 7 mm test port
Calibration Accessory Code	UK6 commercial calibration when ordered

85027C Specifications

PARAMETER	VALUE
Applications	Swept reflection measurements on Type-N 50 ohm devices with HP 8757 AC or DC detection.
Key Features	Type-N female test port to 18 GHz
AC or DC detection with 8757	36 dB directivity to 12.4 GHz
Works with 8756/8755 in AC mode	50 ohm nominal impedance
Technical Specifications	Model: 85027C
Notes	From HP 85027 series directional bridge summary table row 85027C. 85027A is the 7 mm test-port sibling at the same 18 GHz span.

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	85027C
Instrument Type	Directional bridge
Frequency Range	10 MHz to 18 GHz
Nominal Impedance	50 ohm
Input Connector	TypeNfemale
Test Port Connector	TypeNfemale
Directivity 0.01 To 12.4 Ghz	36 dB
Directivity 12.4 To 18 Ghz	34 dB
Test Port Swr 0.01 To 8.4 Ghz	less than 1.15
Test Port Swr 8.4 To 12.4 Ghz	less than 1.25
Test Port Swr 12.4 To 18 Ghz	less than 1.43
Host Analyzers Ac Dc	HP 8757
Host Analyzers Ac Only	HP 8756 and 8755
Detection Modes	AC or DC with 8757
Manufacturer	HP Agilent Keysight
Series Family	85027A/B/C/D/E
Minimum Frequency	10 MHz
Maximum Frequency	18 GHz
Bridge Type	high directivity scalar reflection bridge
Mechanical Package	coaxial directional bridge
Sibling 85027A	same 18 GHz range with 7 mm test port
Calibration Accessory Code	UK6 commercial calibration when ordered
Notes	
From HP 85027 series directional bridge summary table row 85027C. 85027A is the 7 mm test-port sibling at the same 18 GHz span.	

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

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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.