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Data Sheet

August 1, 2026

AGILENT

HP / Agilent 85020A RF directional bridge, 50 ohm, Type N

HP / Agilent 85020A RF Directional Bridge, 50 Ohm, TypeN Overview The HP (Agilent / Keysight) 85020A is a 50 ohm RF directional bridge designed for scalar network analyzers such as the HP 8757A, 8756A, and 8755C. It provides high directivity and good test-port match from 10 MHz to 4.3 GHz in a compact package. An internal zero-bias Schottky diode detector measures return loss of the device under test. Connectors are Type-N female. The companion 85020B is the 75 ohm version with a lower upper frequency limit. The HP (Agilent / Keysight) 85020A is a 50 ohm RF directional bridge designed for scalar network analyzers such as the HP 8757A, 8756A, and 8755C. It provides high directivity and good test-port match from 10 MHz to 4.3 GHz in a compact package. An internal zero-bias Schottky diode detector measures return loss of the device under test. Connectors are Type-N female. The companion 85020B is the 75 ohm version with a lower upper frequency limit. Scalar reflection / return-loss measurements on 50 ohm devices, swept RF component characterization with HP 8755/8756/8757-family scalar analyzers, and general RF bridge measurements where integrated detection is preferred over a separate detector.

No photo

MODEL

Agilent 85020A

CALIBRATION

**N/A — off-catalog
OEM datasheet**

CONDITION

**See OEM
documentation**

STATUS

**Not listed on
Aumictech
inventory**

RFQ / SKU

85020A

LISTING

**Off-catalog — OEM dat
asheet only**

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

Features & description

From manufacturer datasheet

Features

- 50 ohm directional bridge with integrated zero-bias Schottky detector
- Frequency coverage 10 MHz (0.01 GHz) to 4.3 GHz
- High directivity: 40 dB to 3 GHz; 34 dB from 3 to 4.3 GHz
- Type-N female connectors
- Compact rugged housing for bench and rack scalar systems
- Intended companion to HP 8755C / 8756A / 8757A scalar network analyzers

85020A Specifications

PARAMETER	VALUE
Key Features	- 50 ohm directional bridge with integrated zero-bias Schottky detector
Technical Specifications	Model: 85020A
Related Model	85020B: 75 ohm directional bridge, 0.01 to 2.4 GHz, Type-N female; directivity 40 dB over its band; different test-port match specs.

Specifications

PARAMETER	VALUE
Model	85020A
Manufacturer	Hewlett-Packard / Agilent Technologies (Keysight lineage)
Instrument Type	RF directional bridge with detector (50 ohm)
Frequency Range	0.01 to 4.3 GHz (10 MHz to 4.3 GHz)
Nominal Impedance	50 ohms
Connectors	Type-N female
Maximum Power to Input Port	+23 dBm
Directivity	0.01 to 3 GHz: 40 dB; 3 to 4.3 GHz: 34 dB
Test Port Match (SWR)	0.01 to 3 GHz: 1.20; 3 to 4.3 GHz: 1.25
Typical Input Port Match (SWR)	0.01 to 4.3 GHz: 1.25
Typical Insertion Loss	6.5 dB

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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Model	85020A
Manufacturer	Hewlett-Packard / Agilent Technologies (Keysight lineage)
Instrument Type	RF directional bridge with detector (50 ohm)
Frequency Range	0.01 to 4.3 GHz (10 MHz to 4.3 GHz)
Nominal Impedance	50 ohms
Connectors	Type-N female
Maximum Power to Input Port	+23 dBm
Directivity	0.01 to 3 GHz: 40 dB; 3 to 4.3 GHz: 34 dB
Test Port Match (SWR)	0.01 to 3 GHz: 1.20; 3 to 4.3 GHz: 1.25
Typical Input Port Match (SWR)	0.01 to 4.3 GHz: 1.25
Typical Insertion Loss	6.5 dB

Typical Minimum Input Power (for 40 dB return-loss measurement): +4 dBm

Dimensions: approximately 26 H x 110 W x 118 mm D (1.0 x 4.3 x 3.9 in)

Net Weight: approximately 0.5 kg (1.2 lb); shipping approximately 2.3 kg (5 lb)

Related Model

85020B: 75 ohm directional bridge, 0.01 to 2.4 GHz, Type-N female; directivity 40 dB over its band; different test-port match specs.

Standard Operating Conditions

Specifications are as

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: N/A — off-catalog OEM datasheet. See OEM documentation · Not listed on Aumictech inventory.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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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.