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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 85023A

HP Agilent 85023A 75 Ohm Directional Bridge The HP 85023A is the 75 ohm directional-bridge accessory in the 85021/85023 scalar-reflection family. OEM scalar-analyzer accessory tables list 75 ohm impedance for CATV and 75 ohm coaxial reflection measurements with 8756/8757-class analyzers, complementing 50 ohm 85021A/85027 bridges. Swept return-loss measurements on 75 ohm CATV and video coaxial plants. Host Analyzers: HP 8756 8757 scalar network analyzers The HP 85023A is the 75 ohm directional-bridge accessory in the 85021/85023 scalar-reflection family. OEM scalar-analyzer accessory tables list 75 ohm impedance for CATV and 75 ohm coaxial reflection measurements with 8756/8757-class analyzers, complementing 50 ohm 85021A/85027 bridges. Swept return-loss measurements on 75 ohm CATV and video coaxial plants. Host Analyzers: HP 8756 8757 scalar network analyzers Measurement: reflection / return loss on 75 ohm devices



MODEL

**Agilent / Keysight
85023A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

85023A

LISTING

<https://aumictechlabs.com/products/85023a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 85023A is a precision directional bridge for reflection measurements in RF and microwave applications. It enables accurate characterization of components and systems by isolating and measuring signal reflections in network analysis workflows. The 85023A operates across 500 kHz to 1.3 GHz with 50 Ohm impedance and N(f) connectors, delivering directivity

exceeding 35 dB across its standard frequency range. Magnitude response remains below 0.9 dB to 1.3 GHz, with phase stability within ± 10 degrees. Reflection performance reaches ± 1.8 dB magnitude and ± 10 degrees phase from 4 MHz to 1.3 GHz. Optional H26 extends operation to 2.6 GHz, reducing directivity to greater than 30 dB and expanding phase tolerance to ± 15 degrees, with reflection magnitude controlled to 3 dB maximum.

Technical Specifications

Frequency Range: 500 kHz to 1.3 GHz (standard); 4 MHz to 2.6 GHz (with Option H26)

Characteristic Impedance: 50 Ohms

Connector Type: N(f)

Directivity: > 35 dB to 1.3 GHz; > 30 dB to 2.6 GHz (Option H26)

Magnitude Response: < 0.9 dB to 1.3 GHz

Phase Response: ± 10 degrees to 1.3 GHz; ± 15 degrees to 2.6 GHz (Option H26)

Reflection Magnitude: $< \pm 1.8$ dB (4 MHz to 1.3 GHz); < 3 dB (to 2.6 GHz with Option H26)

Reflection Phase: ± 10 degrees (4 MHz to 1.3 GHz); ± 15 degrees (to 2.6 GHz with Option H26)

Key Features

- Precision directional coupling for isolation of incident and reflected signals
- Broad frequency coverage with optional high-frequency extension
- Tight magnitude and phase stability for repeatable measurements
- High directivity ensures accurate reflection coefficient determination

Typical Applications

- Network analyzer reflection measurements
- Component and system characterization
- RF and microwave circuit analysis

Compatibility & Integration

Designed for integration with Agilent/Keysight network analyzers. Forms part of the 8502A Transmission Test Set. Note: Product is obsolete; support availability through Keysight Service Centers or authorized third-party providers.

85023A Characteristics / Specifications

PARAMETER	VALUE
Model	85023A
Instrument Type	Directional bridge
Nominal Impedance	75 ohm
Host Analyzers	HP 8756 8757 scalar network analyzers
Measurement	reflection / return loss on 75 ohm devices
Fifty Ohm Sibling	85021A 50 ohm 10 MHz to 18 GHz
Manufacturer	HP Agilent Keysight
Mechanical Package	coaxial directional bridge
Application Class	CATV and 75 ohm coaxial
System Family	HP 85021/85023 directional bridges
Detection	AC detection with 8756; 8757 per family
Connector Class	75 ohm Type-N class as fitted
Calibration	75 ohm open/short/load
Related 850	50 ohm AC/DC 85027 series is not a 75 ohm replacement
Documentation	HP 85023A 75 ohm directional bridge accessory data
Use With Detectors	scalar analyzer detector input via the bridge
Impedance Note	do not mix 50 ohm and 75 ohm cal kits
Minimum Frequency Class	HF/VHF as published for 85023A
Maximum Frequency Class	UHF/microwave 75 ohm as published for 85023A
Bridge Type	scalar directional bridge
Plant Type	75 ohm coaxial
Impedance Value	75 ohm
Return loss	on 75 ohm devices

85023A Specifications

PARAMETER	VALUE
HP Agilent 85023A 75 Ohm Directional Bridge	Overview
Applications	Swept return-loss measurements on 75 ohm CATV and video coaxial plants.
Key Features	75 ohm directional bridge
Scalar reflection with 8756/8757	CATV and 75 ohm coaxial
Companion to 50 ohm 85021A	Type-N 75 ohm class test port as fitted
Technical Specifications	Model: 85023A

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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PARAMETER	VALUE
Model	85023A
Instrument Type	Directional bridge
Nominal Impedance	75 ohm
Host Analyzers	HP 8756 8757 scalar network analyzers
Measurement	reflection / return loss on 75 ohm devices
Fifty Ohm Sibling	85021A 50 ohm 10 MHz to 18 GHz
Manufacturer	HP Agilent Keysight
Mechanical Package	coaxial directional bridge
Application Class	CATV and 75 ohm coaxial
System Family	HP 85021/85023 directional bridges
Detection	AC detection with 8756; 8757 per family
Connector Class	75 ohm Type-N class as fitted
Calibration	75 ohm open/short/load
Related 85027	50 ohm AC/DC 85027 series is not a 75 ohm replacement
Documentation	HP 85023A 75 ohm directional bridge accessory data
Use With Detectors	scalar analyzer detector input via the bridge
Impedance Note	do not mix 50 ohm and 75 ohm cal kits
Minimum Frequency Class	HF/VHF as published for 85023A
Maximum Frequency Class	UHF/microwave 75 ohm as published for 85023A
Bridge Type	scalar directional bridge
Plant Type	75 ohm coaxial
Impedance Value	75 ohm
Notes	
From HP 85023A 75 ohm directional bridge accessory listings in 8756/8757 scalar catalogs. Confirm 75 ohm connector sex and the matching 75 ohm calibration kit.	

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

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NIST-traceable calibration · SAM registered ·
30-day returns
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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.