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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 85056A Standard Mechanical Calibration Kit, DC to 50 GHz, 2.4 mm

Agilent 85056A 2.4 mm Precision Calibration Kit to 50 GHz The Keysight 85056A is a 2.4 mm precision mechanical calibration kit specified to 50 GHz. OEM 85056A user's and service guide Table 2-3 lists broadband-load return loss, sliding-load return loss, adapter return loss, and offset open/short phase deviation. Precision 2.4 mm OSL and sliding-load calibration to 50 GHz on microwave network analyzers. Instrument Type: Mechanical calibration kit The Keysight 85056A is a 2.4 mm precision mechanical calibration kit specified to 50 GHz. OEM 85056A user's and service guide Table 2-3 lists broadband-load return loss, sliding-load return loss, adapter return loss, and offset open/short phase deviation. Precision 2.4 mm OSL and sliding-load calibration to 50 GHz on microwave network analyzers. Instrument Type: Mechanical calibration kit Load Return Loss Dc To 4 Ghz: greater than or equal to 42 dB (rho less than or equal to 0.00794)



MODEL

**Agilent / Keysight
85056A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

85056A

LISTING

<https://aumictechlabs.com/products/85056a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight/Agilent 85056A is a standard mechanical calibration kit engineered for precision two-port VNA calibration across DC to 50 GHz using 2.4 mm connectors. This kit delivers the

calibration standards, adapters, gaging tools, and accessories required to characterize and correct systematic errors in RF and microwave test systems, enabling high-accuracy network analyzer measurements.

Technical Specifications

Frequency Range: DC to 50 GHz

Connector Type: 2.4 mm

Dimensions: 15 × 12 × 9 inches

Weight: 4 lbs

Calibration standards include offset opens (male and female), offset shorts (male and female), broadband loads (male and female), and sliding loads (male and female). Three 2.4 mm adapters support connector sex conversion: female-female, male-male, and male-female configurations.

Key Features

Connector Gaging & Maintenance

Male and female gage kits with included gage masters

Centering bead for gaging 2.4 mm sliding loads

Ensures connector integrity and dimensional compliance

Calibration Tools

5/16 inch, 8 in-lb (90 N-cm) torque wrench for repeatable standard connections

7 mm open-end wrench

Standards Construction

Broadband loads are metrology-grade 50 Ω terminations optimized to 50 GHz with rugged internal structure for repeatable connections, excellent stability, and controlled return loss. Offset opens and shorts feature precision-machined construction, one-piece inner conductor design for shorts, and low-dielectric-constant plastic support for opens to minimize phase errors and compensation requirements.

Documentation

Calibration definitions disks for Agilent 8510 and 872x platforms, PNA Series software support, user and service guide, and calibration definition data disks.

Typical Applications

Full two-port VNA calibration for RF and microwave measurements requiring traceable, repeatable reference standards across the DC to 50 GHz band.

Compatibility & Integration

Designed for Keysight and Agilent vector network analyzers supporting 2.4 mm interfaces for measurements to 50 GHz.

85056A Characteristics / Specifications

PARAMETER	VALUE
Model	85056A
Instrument Type	Mechanical calibration kit
Connector Type	2.4 mm
Frequency Range	DC to 50 GHz
Load Return Loss Dc To 4 Ghz	greater than or equal to 42 dB (rho less than or equal to 0.00794)
Load Return Loss 4 To 20 Ghz Current	greater than or equal to 34 dB (rho less than or equal to 0.01995)
Load Return Loss 20 To 26p5 Ghz Current	greater than or equal to 30 dB (rho less than or equal to 0.03162)
Load Return Loss 26p5 To 50 Ghz Current	greater than or equal to 26 dB (rho less than or equal to 0.05019)
Obsolete Load Return Loss 4 To 20 Ghz	greater than or equal to 28 dB for obsolete 85056-60008/60009 and 00901-60001/60002 loads
Obsolete Load Return Loss 26p5 To 50 Ghz	greater than or equal to 15 dB for those obsolete loads
Sliding Load Return Loss 4 To 20 Ghz	greater than or equal to 42 dB (rho less than or equal to 0.00794)
Sliding Load Return Loss 20 To 36 Ghz	greater than or equal to 40 dB (rho less than or equal to 0.01000)
Sliding Load Return Loss 36 To 40 Ghz	greater than or equal to 38 dB (rho less than or equal to 0.01259)
Sliding Load Return Loss 40 To 50 Ghz	greater than or equal to 36 dB (rho less than or equal to 0.01585)
Adapter Return Loss Dc To 4 Ghz	greater than or equal to 32 dB (rho less than or equal to 0.02512)
Adapter Return Loss 4 To 26p5 Ghz	greater than or equal to 30 dB (rho less than or equal to 0.03162)
Adapter Return Loss 26p5 To 40 Ghz	greater than or equal to 25 dB (rho less than or equal to 0.05623)
Adapter Return Loss 40 To 50 Ghz	greater than or equal to 20 dB (rho less than or equal to 0.10000)
Offset Open Dc To 2 Ghz	plus or minus 0.5 deg from nominal
Offset Open 2 To 20 Ghz	plus or minus 1.25 deg from nominal
Offset Open 20 To 40 Ghz	plus or minus 1.75 deg from nominal
Offset Open 40 To 50 Ghz	plus or minus 2.25 deg from nominal
Offset Short Dc To 2 Ghz	plus or minus 0.50 deg from nominal

PARAMETER	VALUE
Offset Short 2 To 20 Ghz	plus or minus 1.25 deg from nominal
Offset Short 20 To 40 Ghz	plus or minus 1.5 deg from nominal
Offset Short 40 To 50 Ghz	plus or minus 2.0 deg from nominal
Return loss	Dc To 4 Ghz: greater than or equal to 42 dB (rho less than or equal to 0.00794)

85056A Specifications

PARAMETER	VALUE
Applications	Precision 2.4 mm OSL and sliding-load calibration to 50 GHz on microwave network analyzers.
Key Features	2.4 mm broadband and sliding loads
Offset opens and shorts to 50 GHz	Precision 2.4 mm adapters
Technical Specifications	Model: 85056A

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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Offset Open 2 To 20 Ghz	plus or minus 1.25 deg from nominal
Offset Open 20 To 40 Ghz	plus or minus 1.75 deg from nominal
Offset Open 40 To 50 Ghz	plus or minus 2.25 deg from nominal
Offset Short Dc To 2 Ghz	plus or minus 0.50 deg from nominal
Offset Short 2 To 20 Ghz	plus or minus 1.25 deg from nominal
Offset Short 20 To 40 Ghz	plus or minus 1.5 deg from nominal
Offset Short 40 To 50 Ghz	plus or minus 2.0 deg from nominal

Notes

From Keysight 85056A 2.4 mm Precision Calibration Kit User's and Service Guide Table 2-3. Current broadband-load rows are the replacement-load specifications; obsolete-load rows apply only to the discontinued 85056-60008/60009 and 00901-60001/60002 loads named on that table.

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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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.