

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 85053B Verification Kit, 3.5 mm 300 kHz to 26.5 GHz.

Humidity Type Tested: 0 percent to 95 percent at 40 C non-condensing Function: verify measurement calibration and that the VNA system operates within specifications Form Factor: foam-lined verification kit with serialized devices Literature: Keysight 85053B verification kit user's and service guide Function: verify measurement calibration and that the VNA system operates within specifications Form Factor: foam-lined verification kit with serialized devices Literature: Keysight 85053B verification kit user's and service guide Uncertainty Limits: factory uncertainty limits included with the verification data for system verification



MODEL

**Agilent / Keysight
85053B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

85053B

LISTING

<https://aumictechlabs.com/products/85053b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight 85053B Verification Kit is a calibration standard set designed to verify network analyzer performance and accuracy across 300 kHz to 26.5 GHz. Equipped with 3.5 mm connectors, this kit delivers NIST-traceable measurement data and uncertainties, ensuring instruments operate within specified parameters. It is the verification companion to Keysight PNA series analyzers and works alongside the 85033E and 85052B calibration kits. Technical Specifications Frequency Range: 300 kHz to 26.5 GHz Connector Type: 3.5 mm (mode-free

operation to 34 GHz; mates with standard SMA connectors) Impedance: 50 Ohms nominal Return Loss: Greater than 46 dB (3.5 mm beadless airline) Traceability: NISTKey Features 7.5 cm airline (50 Ohm) Stepped impedance airline (25 Ohm nominal, coefficient = 0.60) 20 dB attenuator 40 dB attenuator Factory-measured verification data on USB drive and data sheets Anti-virus scan report included Storage box and user/service guide The precision 3.5 mm beadless airline delivers exceptional return loss performance. All calibration standards include factory-measured data formatted for direct PNA system verification workflows. Electronic verification data and accompanying documentation must be backed up immediately upon receipt; Keysight maintains these files for one year only. Typical Applications Network analyzer performance verification post-calibration Keysight PNA series instrument validation S-parameter measurement confidence assessment Periodic calibration kit verification Compatibility & Integration Designed for Keysight PNA series network analyzers. Integrates with 85033E and 85052B 3.5 mm calibration kits. The 3.5 mm connector requires careful handling to prevent damage, particularly when mated with lower-grade SMA connectors.

85053B Characteristics / Specifications

PARAMETER	VALUE
Model	85053B
Instrument Type	Network analyzer verification kit
Connector Type	3.5 mm
Frequency Range	300 kHz to 26.5 GHz
Attenuators	20 dB and 40 dB attenuators with data
Airline 50 Ohm	50 ohm airline with factory-measured data
Airline 25 Ohm	25 ohm mismatch airline with factory-measured data
Traceability	factory characterization traceable to Keysight golden standard / NIST path
Data Media	USB drive or data disks with factory-measured verification S-parameters
Data Sheets	printed data sheet for each device
Companion Calibration Kits	85033E and 85052B 3.5 mm calibration kits
Operating Temperature	+20 C to +26 C
Storage Temperature	minus 40 C to +71 C
Error Corrected Temperature	plus or minus 1 C of measurement calibration temperature
Operating Altitude	less than 4500 meters (about 15000 feet)
Storage Altitude	less than 15000 meters (about 50000 feet)
Humidity Type Tested	0 percent to 95 percent at 40 C non-condensing
Function	verify measurement calibration and that the VNA system operates within specifications
Form Factor	foam-lined verification kit with serialized devices
Literature	Keysight 85053B verification kit user's and service guide
Uncertainty Limits	factory uncertainty limits included with the verification data for system verification
Recertification	return the kit to Keysight for recertification of the golden-standard data
Impedance	50 ohm coaxial

PARAMETER	VALUE
Ports	two-port verification devices
Attenuator 20 Db Part	85053BR01 20 dB attenuator with data
Attenuator 40 Db Part	85053BR02 40 dB attenuator with data
Airline 50 Ohm Part	85053BR03 50 ohm airline with data
Airline 25 Ohm Part	85053BR04 25 ohm mismatch airline with data
Case Part	85053-60007 box including foam
Manual Part	85053-90028 user's and service guide
Female Connectors	metrology-grade precision slotless connectors (PSC)
Attenuator Male Pin Depth	0.0000 to minus 0.0076 mm (0.0000 to minus 0.0030 in)
Attenuator Female Pin Depth	0.0000 to minus 0.0076 mm (0.0000 to minus 0.0030 in)
Torque 3p5 Mm Family	90 N-cm (8 in-lb) class of 3.5 mm kits (wrench not included)
Humidity	Type Tested: 0 percent to 95 percent at 40 C non-condensing

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 C to +71 C
Operating temperature	+20 C to +26 C
Operating Temperature	+20 C to +26 C
Humidity	Type Tested: 0 percent to 95 percent at 40 C non-condensing
Error Corrected Temperature	plus or minus 1 C of measurement calibration temperature
Operating Altitude	less than 4500 meters (about 15000 feet)
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Humidity Type Tested	0 percent to 95 percent at 40 C non-condensing
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Literature	Keysight 85053B verification kit user's and service guide
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Attenuator 40 Db Part	85053BR02 40 dB attenuator with data
Airline 50 Ohm Part	85053BR03 50 ohm airline with data
Airline 25 Ohm Part	85053BR04 25 ohm mismatch airline with data
Case Part	85053-60007 box including foam
Manual Part	85053-90028 user's and service guide
Female Connectors	metrology-grade precision slotless connectors (PSC)
Attenuator Male Pin Depth	0.0000 to minus 0.0076 mm (0.0000 to minus 0.0030 in)
Attenuator Female Pin Depth	0.0000 to minus 0.0076 mm (0.0000 to minus 0.0030 in)

PARAMETER	VALUE
Torque 3p5 Mm Family	90 N-cm (8 in-lb) class of 3.5 mm kits (wrench not included) Notes From Keysight 85053B 3.5 mm Verification Kit User's and Service Guide 9018-01143 (300 kHz to 26.5 GHz, 20/40 dB attenuators, airlines, environment Table 2-1, pin-depth Table 2-2). Device S- parameters are the kit-specific factory data.

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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Notes
From Keysight 85053B 3.5 mm Verification Kit User's and Service Guide 9018-01143 (300 kHz to 26.5 GHz, 20/40 dB attenuators, airlines, environment Table 2-1, pin-depth Table 2-2). Device S-parameters are the kit-specific factory data.

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