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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 85054B Standard Mechanical Calibration Kit, DC to 18 GHz, Type-N, 50 ohm

Agilent 85054B 50 Ohm TypeN Precision Calibration Kit to 18 GHz The Keysight 85054B is a 50 ohm Type-N precision kit with lowband loads, sliding loads, and offset opens/shorts for calibrations to 18 GHz including TRM. OEM 85054B user's and service guide Table 2-3 lists lowband-load return loss greater than or equal to 48 dB to 2 GHz and sliding-load return loss greater than or equal to 42 dB from 2 to 18 GHz. Precision Type-N OSL and sliding-load / TRM calibration to 18 GHz. Lowband loads to 2 GHz plus sliding loads 3 to 18 GHz The Keysight 85054B is a 50 ohm Type-N precision kit with lowband loads, sliding loads, and offset opens/shorts for calibrations to 18 GHz including TRM. OEM 85054B user's and service guide Table 2-3 lists lowband-load return loss greater than or equal to 48 dB to 2 GHz and sliding-load return loss greater than or equal to 42 dB from 2 to 18 GHz. Precision Type-N OSL and sliding-load / TRM calibration to 18 GHz. Lowband loads to 2 GHz plus sliding loads 3 to 18 GHz Instrument Type: Mechanical calibration kit



MODEL

**Agilent / Keysight
85054B**

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

85054B

LISTING

<https://aumictechlabs.com/products/85054b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight 85054B is a precision mechanical calibration kit designed to characterize systematic errors in Type-N network analyzer interfaces from DC to 18 GHz. This 50-ohm standard kit delivers calibration accuracy across 1-port, 2-port, and TRM methodologies, making it essential for laboratory and

production RF/microwave measurement environments requiring traceable error correction. Technical Specifications Frequency Range: DC to 18 GHz Impedance: 50 ohms Connector Type: Type-N Calibration Standards: Offset opens (male/female), offset shorts (male/female), lowband loads (male/female, DC to 2 GHz), sliding loads (male/female, 3 GHz to 18 GHz) Supported Calibration Methods: 1-port, 2-port, TRM (Thru-Reflect-Match) Return Loss Lowband Loads: > 48 dB (DC to 2 GHz) Return Loss Sliding Loads: > 42 dB (> 2 GHz to 18 GHz) Return Loss Type-N Adapters: > 34 dB (DC to 8 GHz); > 28 dB (> 8 GHz to 18 GHz) Phase Deviation at 18 GHz Offset Opens: $\pm 1.5^\circ$ Phase Deviation at 18 GHz Offset Shorts: $+1.0^\circ$ Key Features Lowband loads optimized for DC to 2 GHz performance with distributed resistive elements on sapphire substrate Sliding loads engineered for 3 GHz to 18 GHz with precision-machined conductors and connector-damage mitigation design Type-N to 7 mm adapters (qty. 2) for interface flexibility Type-N male-male and female-female adapters included Type-N connector gage set for interface verification 3/4 inch torque wrench (135 N-cm / 12 in-lb) for connector integrity Standards definition files for compatible network analyzers Typical Applications Network analyzer calibration in RF/microwave test labs, production metrology, and system characterization requiring high-accuracy error correction across the DC to 18 GHz band. Compatibility & Integration Designed for Keysight (formerly Agilent) network analyzers with Type-N interfaces. Compatible with HP 8720 series and 8510C systems.

85054B Characteristics / Specifications

PARAMETER	VALUE
Model	85054B
Instrument Type	Mechanical calibration kit
Connector Type	50 ohm TypeN Frequency Range: DC to 18 GHz
Lowband Load Return Loss Dc To 2 Ghz	greater than or equal to 48 dB (rho less than or equal to 0.00398)
Sliding Load Return Loss 2 To 18 Ghz	greater than or equal to 42 dB (rho less than or equal to 0.00794)
Adapter Return Loss Dc To 8 Ghz	greater than or equal to 34 dB (rho less than or equal to 0.0200)
Adapter Return Loss 8 To 18 Ghz	greater than or equal to 28 dB (rho less than or equal to 0.0398)
Offset Open Phase At 18 Ghz	plus or minus 1.5 deg from nominal
Offset Short Phase At 18 Ghz	plus or minus 1.0 deg from nominal
Operating Temperature	+20 C to +26 C
Storage Temperature	minus 40 C to +75 C
Error Corrected Temperature	plus or minus 1 C of measurement calibration temperature
Torque Type N	135 N-cm (12 in-lb) plus or minus 13.5 N-cm
Sliding Load Pin Depth Typical	0 to minus 7.6 um (0 to minus 3.0 mils) typical pin depth table
Lowband Load Pin Depth Typical	0 to minus 50.8 um (0 to minus 20.0 mils) typical pin depth table
Calibration Methods	1-port, 2-port, and TRM (thru-reflect-match)
Sliding Load Design Band	excellent performance from 3 GHz to 18 GHz per kit overview
Lowband Load Design Band	optimized to 2 GHz
Gage Set	male and female Type-N connector gages and gage masters included
Adapters Included	Type-N male-male, female-female, Type-N female to 7 mm, Type-N male to 7 mm
Related Economy Type N	85032B/E cover Type-N to 6 GHz without sliding loads
Return loss	Dc To 2 Ghz: greater than or equal to 48 dB (rho less than or equal to 0.00398)

85054B Specifications

PARAMETER	VALUE
Applications	Precision Type-N OSL and sliding-load / TRM calibration to 18 GHz.
Key Features	Lowband loads to 2 GHz plus sliding loads 3 to 18 GHz
Offset opens and shorts	Type-N and Type-N-to-7 mm adapters
Connector gages included	135 N-cm (12 in-lb) Type-N torque
Technical Specifications	Model: 85054B

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 C to +75 C
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Related Economy Type N	85032B/E cover Type-N to 6 GHz without sliding loads Notes From Keysight 85054B 50 ohm Type-N Calibration Kit User's and Service Guide electrical specification table, environment table, pin-depth table, and torque table.

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 85054B 50 ohm Type-N Calibration Kit User's and Service Guide electrical specification table, environment table, pin-depth table, and torque 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 ·
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.