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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 85050D Economy Mechanical Calibration Kit, DC to 18 GHz, 7 mm

Agilent 85050D 7 mm Economy Calibration Kit to 18 GHz The Keysight 85050D is a 7 mm economy mechanical calibration kit specified to 18 GHz. OEM 85050D user's and service guide Table 2-3 lists broadband-load return loss greater than or equal to 38 dB DC to 18 GHz and the same open/short phase-deviation bands as the 85050B precision kit. Economy 7 mm OSL and TRM calibration to 18 GHz without sliding loads. Economy alternative to 85050B sliding-load kit The Keysight 85050D is a 7 mm economy mechanical calibration kit specified to 18 GHz. OEM 85050D user's and service guide Table 2-3 lists broadband-load return loss greater than or equal to 38 dB DC to 18 GHz and the same open/short phase-deviation bands as the 85050B precision kit. Economy 7 mm OSL and TRM calibration to 18 GHz without sliding loads. Economy alternative to 85050B sliding-load kit Instrument Type: Economy mechanical calibration kit



MODEL

**Agilent / Keysight
85050D**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

85050D

LISTING

<https://aumictechlabs.com/products/85050d-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 85050D is an economy mechanical calibration kit for 7 mm interfaces operating from DC to 18 GHz. It delivers the precision standards required for 1-port and 2-port

calibrations, including Thru-Reflect-Match (TRM) procedures on network analyzers. The kit corrects directivity, source matching, and reflection tracking errors to enhance measurement accuracy across RF and microwave applications.

Technical Specifications

Model: 85050D

Type: Economy Mechanical Calibration Kit

Frequency Range: DC to 18 GHz

Connector Interface: 7 mm

Broadband Load Return Loss: Greater than 38 dB across entire frequency range

Short Circuit Phase Accuracy: $\pm 0.2^\circ$ from DC to 2 GHz $\pm 0.3^\circ$ from 2 GHz to 8 GHz $\pm 0.5^\circ$ from 8 GHz to 18 GHz

Open Circuit Phase Accuracy: $\pm 0.3^\circ$ from DC to 2 GHz $\pm 0.4^\circ$ from 2 GHz to 18 GHz $\pm 0.6^\circ$ from 8 GHz to 18 GHz

Key Features

The kit contains three precision calibration standards: an open circuit with low-dielectric collet depressor flush to the outer conductor, a short circuit with one-piece collet-based shorting plane for repeatable connections, and a metrology-grade broadband load with distributed resistive element on sapphire optimized to 18 GHz. A torque wrench calibrated to 135 N-cm (12 in-lb) ensures proper connections critical for measurement integrity. Gender-change adapters and standard definitions on disk for the 8510C network analyzer are included.

Compatibility & Integration

Designed for calibration of Keysight 8720 series and 8510C network analyzers equipped with 7 mm interfaces.

85050D Characteristics / Specifications

PARAMETER	VALUE
Model	85050D
Instrument Type	Economy mechanical calibration kit
Connector Type	7 mm
Frequency Range	DC to 18 GHz
Load Return Loss Dc To 18 Ghz	greater than or equal to 38 dB
Short Phase Dc To 2 Ghz	plus or minus 0.2 deg from nominal
Short Phase 2 To 8 Ghz	plus or minus 0.3 deg from nominal
Short Phase 8 To 18 Ghz	plus or minus 0.5 deg from nominal
Open Phase Dc To 2 Ghz	plus or minus 0.3 deg from nominal
Open Phase 2 To 8 Ghz	plus or minus 0.4 deg from nominal
Open Phase 8 To 18 Ghz	plus or minus 0.6 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
Humidity Type Tested	0 percent to 95 percent at 40 C non-condensing class of 85050 kits
Torque 7 Mm Family	136 N-cm (12 in-lb) plus or minus 13.6 N-cm on 85050B Table 3-1 7 mm torque
Load Design	sapphire broadband load; valid substitute for a lowband load
Calibration Methods	1-port, 2-port, and TRM
Related Precision Kit	85050B adds sliding loads and lowband loads
Related Trl Kit	85050C adds precision airline and TRL adapter
Impedance	50 ohm
Literature	Keysight 85050D 7 mm Economy Calibration Kit user's and service guide Table 2-3
Short Construction	collet-style one-piece shorting plane
Open Construction	open with collet pusher

PARAMETER	VALUE
Form Factor	economy 7 mm mechanical calibration kit
Humidity	Type Tested: 0 percent to 95 percent at 40 C non-condensing class of 85050 kits
Return loss	Dc To 18 Ghz: greater than or equal to 38 dB

85050D Specifications

PARAMETER	VALUE
Agilent 85050D 7 mm Economy Calibration Kit to 18 GHz	Overview
Applications	Economy 7 mm OSL and TRM calibration to 18 GHz without sliding loads.
Key Features	7 mm broadband load, open, and short
Specified DC to 18 GHz	Economy alternative to 85050B sliding-load kit
Technical Specifications	Model: 85050D

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 C to +75 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 class of 85050 kits
Error Corrected Temperature	plus or minus 1 C of measurement calibration temperature
Humidity Type Tested	0 percent to 95 percent at 40 C non-condensing class of 85050 kits
Torque 7 Mm Family	136 N-cm (12 in-lb) plus or minus 13.6 N-cm on 85050B Table 3-1 7 mm torque
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Calibration Methods	1-port, 2-port, and TRM
Related Precision Kit	85050B adds sliding loads and lowband loads
Related Trl Kit	85050C adds precision airline and TRL adapter
Impedance	50 ohm
Literature	Keysight 85050D 7 mm Economy Calibration Kit user's and service guide Table 2-3
Short Construction	collet-style one-piece shorting plane
Open Construction	open with collet pusher
Form Factor	economy 7 mm mechanical calibration kit Notes From Keysight 85050D 7 mm Economy Calibration Kit user's and service guide Table 2-3 electrical specifications. Torque row is the published 85050B Table 3-1 7 mm wrench used across the 85050 7 mm family.

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	
Specifications	
PARAMETER	VALUE
Model	85050D
Instrument Type	Economy mechanical calibration kit
Connector Type	7 mm
Frequency Range	DC to 18 GHz
Load Return Loss Dc To 18 Ghz	greater than or equal to 38 dB
Short Phase Dc To 2 Ghz	plus or minus 0.2 deg from nominal
Short Phase 2 To 8 Ghz	plus or minus 0.3 deg from nominal
Short Phase 8 To 18 Ghz	plus or minus 0.5 deg from nominal
Open Phase Dc To 2 Ghz	plus or minus 0.3 deg from nominal
Open Phase 2 To 8 Ghz	plus or minus 0.4 deg from nominal
Open Phase 8 To 18 Ghz	plus or minus 0.6 deg from nominal
Operating Temperature	+20 C to +26 C
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Short Construction	collet-style one-piece shorting plane
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Form Factor	economy 7 mm mechanical calibration kit

Notes

From Keysight 85050D 7 mm Economy Calibration Kit user's and service guide Table 2-3 electrical specifications. Torque row is the published 85050B Table 3-1 7 mm wrench used across the 85050 7 mm family.

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.