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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 85561A 4-in-1 OSLT Mechanical Calibration Kit, DC to 40 GHz, 2.92 mm (f)

Keysight Agilent 85561A 4-in-1 OSLT Mechanical Calibration Kit 2.92 mm Female DC to 40 GHz

The Keysight 85561A is a compact 4-in-1 OSLT mechanical calibration kit with 2.92 mm female 50 ohm connectors specified DC to 40 GHz. OEM data sheet 85561-90001 lists female-female through delay 116.114 ps, load return loss by band to 40 GHz, 0.25 W load, and 8 lb-inch (90 N-cm) 2.92 mm torque. OSLT calibration of 2.92 mm female devices to 40 GHz on PNA and millimeter coaxial systems. Protective caps and annual inspection interval

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Instrument Type: 4-in-1 OSLT mechanical calibration kit



MODEL

**Agilent / Keysight
85561A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

85561A

LISTING

<https://aumictechlabs.com/products/85561a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 85561A is a 4-in-1 OSLT mechanical calibration kit engineered for VNA calibration across DC to 40 GHz. This kit has Open, Short, Load, and Thru standards in a compact 2.92 mm (f) connector interface, enabling precise vector network analyzer verification and RF instrument calibration across extended frequency ranges.

Technical Specifications

Calibration Standards: Open, Short, Load, Thru (OSLT) Connector Type: 2.92 mm (f) female Characteristic Impedance: 50 Ohms Frequency Range: DC to 40 GHz Load Return Loss: 24 to 39 dB (frequency dependent)

Key Features

- Four independent calibration standards in one compact assembly
- Lightweight, portable design suitable for bench and field use
- Mechanically solid construction for repeated calibration cycles
- Precision-engineered to maintain performance across full frequency span

Typical Applications

- Network analyzer calibration and verification
- S-parameter measurement validation
- RF circuit characterization
- Impedance and reflection coefficient calibration
- Broadband RF system alignment

Compatibility & Integration

The 85561A integrates with VNA systems requiring 2.92 mm female connectors and operates within the 855xxA Series family. The kit supports calibration workflows for instruments requiring OSLT reference standards across microwave and millimeter-wave frequencies. Detailed calibration procedures and performance specifications are available in Keysight technical documentation and application notes addressing calibration standards selection.

85561A Characteristics / Specifications

PARAMETER	VALUE
Model	85561A
Instrument Type	4-in-1 OSLT mechanical calibration kit
Connector Type	2.92 mm female 50 ohm
Frequency Range	DC to 40 GHz
System Impedance	50 ohm
Through Electrical Delay	116.114 ps female-female
Through Offset Loss	2.5 Gohm/s
Through Return Loss Dc To 4 Ghz Typical	greater than or equal to 30 dB
Through Return Loss 4 To 26p5 Ghz Typical	greater than or equal to 26 dB
Through Return Loss 26p5 To 40 Ghz Typical	greater than or equal to 21 dB
Through Insertion Loss Typical	less than or equal to 0.04 dB times sqrt(f/GHz) from DC to 40 GHz
Load Dc Resistance	50 ohm plus or minus 0.5 ohm
Load Return Loss Dc To 4 Ghz	greater than or equal to 39 dB
Load Return Loss 4 To 10 Ghz	greater than or equal to 33 dB
Load Return Loss 10 To 26p5 Ghz	greater than or equal to 28 dB
Load Return Loss 26p5 To 40 Ghz	greater than or equal to 24 dB
Load Maximum Power	0.25 W
Open Offset Delay	31.5 ps
Short Offset Delay	31.3 ps
Open Phase Dc To 4 Ghz	less than or equal to 1.5 deg from nominal
Open Phase 4 To 10 Ghz	less than or equal to 2.5 deg from nominal
Open Phase 10 To 26p5 Ghz	less than or equal to 4.5 deg from nominal
Open Phase 26p5 To 40 Ghz	less than or equal to 5.0 deg from nominal
Short Phase Dc To 4 Ghz	less than or equal to 1.5 deg from nominal

PARAMETER	VALUE
Short Phase 4 To 10 Ghz	less than or equal to 2.0 deg from nominal
Short Phase 10 To 26p5 Ghz	less than or equal to 3.5 deg from nominal
Short Phase 26p5 To 40 Ghz	less than or equal to 4.5 deg from nominal
Operating Temperature	plus 18 C to plus 28 C non-condensing
Storage Temperature	minus 40 C to plus 70 C
Inspection Interval	1 year recommended
Torque 2p92 Mm	8 lb-inch (90 N-cm)
Return loss	Dc To 4 Ghz Typical: greater than or equal to 30 dB

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 C to plus 70 C
Operating temperature	plus 18 C to plus 28 C non-condensing
Operating Temperature	plus 18 C to plus 28 C non-condensing
Inspection Interval	1 year recommended
Torque 2p92 Mm	8 lb-inch (90 N-cm) Notes Numeric rows from Keysight 85561A Cal Kit data sheet 85561-90001 Edition C.

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	85561A
Instrument Type	4-in-1 OSLT mechanical calibration kit
Connector Type	2.92 mm female 50 ohm
Frequency Range	DC to 40 GHz
System Impedance	50 ohm
Through Electrical Delay	116.114 ps female-female
Through Offset Loss	2.5 Gohm/s
Through Return Loss Dc To 4 Ghz Typical: greater than or equal to 30 dB	
Through Return Loss 4 To 26p5 Ghz Typical: greater than or equal to 26 dB	
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Specifications	
PARAMETER	VALUE
Through Insertion Loss Typical	less than or equal to 0.04 dB times sqrt(f/GHz) from DC to 40 GHz
Load Dc Resistance	50 ohm plus or minus 0.5 ohm
Load Return Loss Dc To 4 Ghz	greater than or equal to 39 dB
Load Return Loss 4 To 10 Ghz	greater than or equal to 33 dB
Load Return Loss 10 To 26p5 Ghz	greater than or equal to 28 dB
Load Return Loss 26p5 To 40 Ghz	greater than or equal to 24 dB
Load Maximum Power	0.25 W
Open Offset Delay	31.5 ps
Short Offset Delay	31.3 ps
Open Phase Dc To 4 Ghz	less than or equal to 1.5 deg from nominal
Open Phase 4 To 10 Ghz	less than or equal to 2.5 deg from nominal
Open Phase 10 To 26p5 Ghz	less than or equal to 4.5 deg from nominal
Open Phase 26p5 To 40 Ghz	less than or equal to 5.0 deg from nominal
Short Phase Dc To 4 Ghz	less than or equal to 1.5 deg from nominal

PARAMETER	VALUE
Short Phase 4 To 10 Ghz	less than or equal to 2.0 deg from nominal
Short Phase 10 To 26p5 Ghz	less than or equal to 3.5 deg from nominal
Short Phase 26p5 To 40 Ghz	less than or equal to 4.5 deg from nominal
Operating Temperature	plus 18 C to plus 28 C non-condensing
Storage Temperature	minus 40 C to plus 70 C
Inspection Interval	1 year recommended
Torque 2p92 Mm	8 lb-inch (90 N-cm)

Notes

Numeric rows from Keysight 85561A Cal Kit data sheet 85561-90001 Edition C.

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

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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.