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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 85521A 4-in-1 OSLT Mechanical Calibration Kit, DC to 26.5 GHz, Type-3.5 mm (f) 50 ohm

Keysight Agilent 85521A 4-in-1 OSLT Mechanical Calibration Kit 3.5 mm Female DC to 26.5 GHz The Keysight 85521A is a compact 4-in-1 OSLT mechanical calibration kit with 3.5 mm female 50 ohm connectors specified DC to 26.5 GHz. OEM data sheet 85521-90001 lists female-female through delay 115.881 ps, load return loss by band, 0.25 W load power, and 8 lb-inch (90 N-cm) 3.5 mm torque. OSLT calibration of 3.5 mm female devices to 26.5 GHz on microwave network analyzers. Instrument Type: 4-in-1 OSLT mechanical calibration kit The Keysight 85521A is a compact 4-in-1 OSLT mechanical calibration kit with 3.5 mm female 50 ohm connectors specified DC to 26.5 GHz. OEM data sheet 85521-90001 lists female-female through delay 115.881 ps, load return loss by band, 0.25 W load power, and 8 lb-inch (90 N-cm) 3.5 mm torque. OSLT calibration of 3.5 mm female devices to 26.5 GHz on microwave network analyzers. Instrument Type: 4-in-1 OSLT mechanical calibration kit Through Electrical Delay: 115.881 ps female-female



MODEL

**Agilent / Keysight
85521A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

85521A

LISTING

<https://aumictechlabs.com/products/85521a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight 85521A is a 4-in-1 OSLT mechanical calibration kit engineered to characterize and correct systematic errors in vector network analyzers and RF measurement systems. Operating across DC to 26.5 GHz with Type-3.5 mm female connectors and 50-ohm impedance, this kit delivers the four essential calibration standards Open, Short, Load, and Thru - in a single, portable assembly. The integrated Thru standard enables direct calibration of non-insertable devices such as filters and female-female connector cables, eliminating the need for external reference standards during those measurement phases.

Technical Specifications

Calibration Standards:
Open, Short, Load, Thru (OSLT) Connector Type: 3.5 mm (female) Impedance: 50 ohm Frequency Range: DC to 26.5 GHz Physical Dimensions: 68 × 37 × 14 mm

Performance Characteristics

Open Phase Error: DC to 5 GHz: $\leq 1.5^\circ$ 5 to 15 GHz: $\leq 3.0^\circ$ 15 to 26.5 GHz: $\leq 4.5^\circ$ Short Phase Error: DC to 5 GHz: $\leq 1.0^\circ$ 5 to 15 GHz: $\leq 2.5^\circ$ 15 to 26.5 GHz: $\leq 4.0^\circ$ Load Return Loss: DC to 5 GHz: ≥ 42 dB 5 to 15 GHz: ≥ 36 dB 15 to 26.5 GHz: ≥ 32 dB

Key Features

- Compact, lightweight design optimized for field and lab use
- Tight phase error specifications across the full frequency range ensure accurate de-embedding
- Integrated Thru standard streamlines calibration workflows for female-female mated components
- 50-ohm impedance standard for broadband RF applications

Typical Applications

- Vector network analyzer calibration and error correction
- Systematic error characterization in RF test setups
- Calibration of passive components with female connector interfaces
- Broadband impedance and reflection measurements

Compatibility & Integration

The 85521A integrates with the 8522xA Series and all instruments featuring 3.5 mm female connectors. Its compact form factor supports both benchtop and portable measurement configurations.

85521A Characteristics / Specifications

PARAMETER	VALUE
Model	85521A
Instrument Type	4-in-1 OSLT mechanical calibration kit
Connector Type	3.5 mm female 50 ohm
Frequency Range	DC to 26.5 GHz
System Impedance	50 ohm
Through Electrical Delay	115.881 ps female-female
Through Return Loss Dc To 5 Ghz Typical	greater than or equal to 34 dB
Through Return Loss 5 To 26p5 Ghz Typical	greater than or equal to 30 dB
Through Insertion Loss Typical	less than or equal to 0.035 dB times sqrt(f/GHz) from 0 to 26.5 GHz
Load Dc Resistance	50 ohm plus or minus 0.5 ohm
Load Return Loss Dc To 5 Ghz	greater than or equal to 42 dB
Load Return Loss 5 To 15 Ghz	greater than or equal to 36 dB
Load Return Loss 15 To 26p5 Ghz	greater than or equal to 32 dB
Load Maximum Power	0.25 W
Open Offset Delay	31.832 ps
Short Offset Delay	30.581 ps
Short Phase Dc To 5 Ghz	less than or equal to 1.0 deg from nominal
Short Phase 5 To 15 Ghz	less than or equal to 2.5 deg from nominal
Short Phase 15 To 26p5 Ghz	less than or equal to 4.0 deg from nominal
Open Phase Dc To 5 Ghz	less than or equal to 1.5 deg from nominal
Open Phase 5 To 15 Ghz	less than or equal to 3.0 deg from nominal
Open Phase 15 To 26p5 Ghz	less than or equal to 4.5 deg from nominal
Operating Temperature	plus 18 C to plus 28 C
Storage Temperature	minus 40 C to plus 70 C per EN 60068-2-1 and EN 60068-2-2
Inspection Interval	1 year recommended

PARAMETER	VALUE
Torque 3p5 Mm	8 lb-inch (90 N-cm)
Return loss	Dc To 5 Ghz Typical: greater than or equal to 34 dB

85521A Specifications

PARAMETER	VALUE
Applications	OSLT calibration of 3.5 mm female devices to 26.5 GHz on microwave network analyzers.
Key Features	Single-body 3.5 mm female OSLT
Specified DC to 26.5 GHz	50 ohm plus or minus 0.5 ohm load
Protective caps when not in use	8 lb-inch 3.5 mm torque wrench practice
Technical Specifications	Model: 85521A
Notes	Numeric rows from Keysight 85521A Cal Kit data sheet 85521-90001.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 C to plus 70 C per EN 60068-2-1 and EN 60068-2-2
Operating temperature	plus 18 C to plus 28 C
Operating Temperature	plus 18 C to plus 28 C
Inspection Interval	1 year recommended
Torque 3p5 Mm	8 lb-inch (90 N-cm) Notes Numeric rows from Keysight 85521A Cal Kit data sheet 85521-90001.

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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PARAMETER	VALUE
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Storage Temperature	minus 40 C to plus 70 C per EN 60068-2-1 and EN 60068-2-2

PARAMETER	VALUE
Inspection Interval	1 year recommended
Torque 3p5 Mm	8 lb-inch (90 N-cm)

Notes
Numeric rows from Keysight 85521A Cal Kit data sheet 85521-90001.

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>

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.