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**Data Sheet**

August 15, 2026

AGILENT / KEYSIGHT

# Agilent / Keysight 85056K Mechanical Calibration Kit, DC to 50 GHz, 2.4 mm & 2.92 mm

Storage Temperature: minus 40 C to plus 75 C Torque 2p4 And 2p92 Mm: 90 N-cm (8 in-lb) Error Corrected Temperature: plus or minus 1 C of measurement calibration temperature 2.4 mm electrical rows from Keysight 85056D Table 2-3 (85056 2.4 mm family). Connector mix and 50 GHz upper limit from Keysight 85056K mechanical calibration kit listings (DC to 50 GHz, 2.4 mm and 2.92 mm). 2.92 mm devices are used within the 2.92 mm connector rating (40 GHz). Torque 2p4 And 2p92 Mm: 90 N-cm (8 in-lb) Error Corrected Temperature: plus or minus 1 C of measurement calibration temperature 2.4 mm electrical rows from Keysight 85056D Table 2-3 (85056 2.4 mm family). Connector mix and 50 GHz upper limit from Keysight 85056K mechanical calibration kit listings (DC to 50 GHz, 2.4 mm and 2.92 mm). 2.92 mm devices are used within the 2.92 mm connector rating (40 GHz).



MODEL

**Agilent / Keysight  
85056K**

CALIBRATION

**Available on  
request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**85056K**

LISTING

<https://aumictechlabs.com/products/85056k-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

## This unit

The Agilent/Keysight 85056K is a mechanical calibration kit for precise network analyzer calibration across DC to 50 GHz, supporting 2.4 mm and 2.92 mm connector systems. It delivers systematic error correction and high-fidelity RF and microwave measurements through precision-machined calibration standards, metrology-grade terminations, and adapter assemblies

engineered for repeatable, broadband performance. Technical Specifications -# Frequency Range DC to 50 GHz (2.4 mm connectors) DC to 40 GHz (with 2.4 mm to 2.92 mm adapters) -# Connector Systems 2.4 mm and 2.92 mm compatible Precision adapters with tight tolerances: 2.4 mm to 2.4 mm and 2.4 mm to 2.92 mm Nominal electrical lengths matched for calibration of non-insertable devices -# Calibration Standards Offset Opens and Shorts: Machined precision standards with controlled pin depth and precise phase deviation specifications across DC to 50 GHz, with frequency-dependent tolerances. Broadband Terminations: Metrology-grade 50Ω loads rated to 50 GHz, featuring distributed resistive element on sapphire substrate for stability and repeatable return loss performance. Sliding Loads: Optimized operation from 4 GHz to 50 GHz. Key Features Offset opens and shorts with tightly controlled phase error across full frequency band Repeatable connections via rugged internal termination structure Precision adapters designed for stable broadband performance and non-insertable device calibration Complete mechanical standard set with minimal systematic error Included Accessories Torque wrenches: 5/16 in at 90 N-cm (8 in-lb) and 5/16 in at 56 N-cm (5 in-lb) 7 mm open-end wrench Connector gauges for interface verification and maintenance Calibration definition data disk for network analyzer loading User's and Service Guide with specifications, maintenance, care, and performance verification procedures Compatibility & Integration Designed for use with 2.4 mm test port cables. Kit includes adapters to facilitate cross-connector measurements and maintains identical nominal electrical lengths to support both insertable and non-insertable device characterization.

## 85056K Characteristics / Specifications

| PARAMETER                       | VALUE                                                              |
|---------------------------------|--------------------------------------------------------------------|
| Model                           | 85056K                                                             |
| Instrument Type                 | Mechanical calibration kit                                         |
| Connector Types                 | 2.4 mm and 2.92 mm                                                 |
| Frequency Range 2p4 Mm          | DC to 50 GHz                                                       |
| Frequency Range 2p92 Mm         | DC to 40 GHz class (2.92 mm connector rating)                      |
| System Impedance                | 50 ohm                                                             |
| Load Return Loss Dc To 4 Ghz    | greater than or equal to 42 dB (rho less than or equal to 0.00794) |
| Load Return Loss 4 To 20 Ghz    | greater than or equal to 34 dB (rho less than or equal to 0.01995) |
| Load Return Loss 20 To 26p5 Ghz | greater than or equal to 30 dB (rho less than or equal to 0.03162) |
| Load Return Loss 26p5 To 50 Ghz | greater than or equal to 26 dB (rho less than or equal to 0.05012) |
| Offset Open Dc To 2 Ghz         | plus or minus 0.5 deg from nominal                                 |
| Offset Open 2 To 20 Ghz         | plus or minus 1.25 deg from nominal                                |
| Offset Open 20 To 40 Ghz        | plus or minus 1.75 deg from nominal                                |
| Offset Open 40 To 50 Ghz        | plus or minus 2.25 deg from nominal                                |
| Offset Short Dc To 2 Ghz        | plus or minus 0.50 deg from nominal                                |
| Offset Short 2 To 20 Ghz        | plus or minus 1.25 deg from nominal                                |
| Offset Short 20 To 40 Ghz       | plus or minus 1.5 deg from nominal                                 |
| Offset Short 40 To 50 Ghz       | plus or minus 2.0 deg from nominal                                 |
| Operating Temperature           | plus 20 C to plus 26 C                                             |
| Storage Temperature             | minus 40 C to plus 75 C                                            |
| Torque 2p4 And 2p92 Mm          | 90 N-cm (8 in-lb)                                                  |
| Related 2p4 Mm Economy Kit      | 85056D                                                             |
| Related 2p4 Mm Precision Kit    | 85056A                                                             |
| Related 2p92 Mm 4in             | 85561A / 85562A                                                    |
| Error Corrected Temperature     | plus or minus 1 C of measurement calibration temperature           |

| PARAMETER   | VALUE                                                                           |
|-------------|---------------------------------------------------------------------------------|
| Return loss | Dc To 4 Ghz: greater than or equal to 42 dB (rho less than or equal to 0.00794) |

# 85056K Specifications

| PARAMETER                    | VALUE                                                                                       |
|------------------------------|---------------------------------------------------------------------------------------------|
| Applications                 | Calibrating mixed 2.4 mm / 2.92 mm coaxial systems to 40 GHz (2.92 mm) and 50 GHz (2.4 mm). |
| Key Features                 | Combined 2.4 mm and 2.92 mm standards                                                       |
| DC to 50 GHz 2.4 mm coverage | 2.92 mm interface to 40 GHz class                                                           |
| Technical Specifications     | Model: 85056K                                                                               |

# General Specifications & Supplementary Characteristics

| PARAMETER                    | VALUE                                                                                                                                                                                                                                                                                                                                                |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Storage temperature          | minus 40 C to plus 75 C                                                                                                                                                                                                                                                                                                                              |
| Operating temperature        | plus 20 C to plus 26 C                                                                                                                                                                                                                                                                                                                               |
| Operating Temperature        | plus 20 C to plus 26 C                                                                                                                                                                                                                                                                                                                               |
| Torque 2p4 And 2p92 Mm       | 90 N-cm (8 in-lb)                                                                                                                                                                                                                                                                                                                                    |
| Related 2p4 Mm Economy Kit   | 85056D                                                                                                                                                                                                                                                                                                                                               |
| Related 2p4 Mm Precision Kit | 85056A                                                                                                                                                                                                                                                                                                                                               |
| Related 2p92 Mm 4in          | 85561A / 85562A                                                                                                                                                                                                                                                                                                                                      |
| Error Corrected Temperature  | plus or minus 1 C of measurement calibration temperature Notes 2.4 mm electrical rows from Keysight 85056D Table 2-3 (85056 2.4 mm family). Connector mix and 50 GHz upper limit from Keysight 85056K mechanical calibration kit listings (DC to 50 GHz, 2.4 mm and 2.92 mm). 2.92 mm devices are used within the 2.92 mm connector rating (40 GHz). |

# 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                           | 85056K                                                             |
| Instrument Type                 | Mechanical calibration kit                                         |
| Connector Types                 | 2.4 mm and 2.92 mm                                                 |
| Frequency Range 2p4 Mm          | DC to 50 GHz                                                       |
| Frequency Range 2p92 Mm         | DC to 40 GHz class (2.92 mm connector rating)                      |
| System Impedance                | 50 ohm                                                             |
| Load Return Loss Dc To 4 Ghz    | greater than or equal to 42 dB (rho less than or equal to 0.00794) |
| Load Return Loss 4 To 20 Ghz    | greater than or equal to 34 dB (rho less than or equal to 0.01995) |
| Load Return Loss 20 To 26p5 Ghz | greater than or equal to 30 dB (rho less than or equal to 0.03162) |
| Load Return Loss 26p5 To 50 Ghz | greater than or equal to 26 dB (rho less than or equal to 0.05012) |
| Offset Open Dc To 2 Ghz         | plus or minus 0.5 deg from nominal                                 |
| Offset Open 2 To 20 Ghz         | plus or minus 1.25 deg from nominal                                |
| Offset Open 20 To 40 Ghz        | plus or minus 1.75 deg from nominal                                |
| Offset Open 40 To 50 Ghz        | plus or minus 2.25 deg from nominal                                |
| Offset Short Dc To 2 Ghz        | plus or minus 0.50 deg from nominal                                |
| Offset Short 2 To 20 Ghz        | plus or minus 1.25 deg from nominal                                |
| Offset Short 20 To 40 Ghz       | plus or minus 1.5 deg from nominal                                 |
| Offset Short 40 To 50 Ghz       | plus or minus 2.0 deg from nominal                                 |
| Operating Temperature           | plus 20 C to plus 26 C                                             |
| Storage Temperature             | minus 40 C to plus 75 C                                            |
| Torque 2p4 And 2p92 Mm          | 90 N-cm (8 in-lb)                                                  |
| Related 2p4 Mm Economy Kit      | 85056D                                                             |
| Related 2p4 Mm Precision Kit    | 85056A                                                             |
| Related 2p92 Mm 4in1            | 85561A / 85562A                                                    |
| Error Corrected Temperature     | plus or minus 1 C of measurement calibration temperature           |

#### Notes

2.4 mm electrical rows from Keysight 85056D Table 2-3 (85056 2.4 mm family). Connector mix and 50 GHz upper limit from Keysight 85056K mechanical calibration kit listings (DC to 50 GHz, 2.4 mm and 2.92 mm). 2.92 mm devices are used within the 2.92 mm connector rating (40 GHz).

### Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: [sales@aumictech.com](mailto: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.