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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 85033A

Agilent 85033A 3.5 mm Mechanical Calibration Kit The Agilent/HP 85033A is a precision 3.5 mm mechanical calibration kit used to calibrate 8753-family network analyzers and 50 Ohm test sets for devices with 3.5 mm and SMA connectors. Standards include fixed terminations, opens, and shorts with precision 7 mm to 3.5 mm adapters for non-insertable devices. OSL calibration of 3.5 mm and SMA devices with 8753C and 8752A network analyzers, and transfer of calibration through APC-7 adapters. Precision 3.5 mm open short load standards The Agilent/HP 85033A is a precision 3.5 mm mechanical calibration kit used to calibrate 8753-family network analyzers and 50 Ohm test sets for devices with 3.5 mm and SMA connectors. Standards include fixed terminations, opens, and shorts with precision 7 mm to 3.5 mm adapters for non-insertable devices. OSL calibration of 3.5 mm and SMA devices with 8753C and 8752A network analyzers, and transfer of calibration through APC-7 adapters. Precision 3.5 mm open short load standards 50 Ohm terminations specified into microwave frequencies



MODEL

**Agilent / Keysight
85033A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

85033A

LISTING

<https://aumictechlabs.com/products/85033a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 85033A is a 3.5 mm SOLT calibration kit engineered for systematic error characterization of Vector Network Analyzers. Precision connectors deliver repeatable measurements across multiple test port types and frequency ranges, with field-proven

performance for critical VNA calibration workflows. Technical Specifications Frequency Range: DC to 9 GHz Connector Type: SMA connectors; compatible with SMA, 3.5 mm, and 2.92 mm test ports Impedance: 50 Ω Calibration Methods: Short Open Load Thru (SOLT) / Thru Open Short Match (TOSM) Load Return Loss: ≥ 32 dB Phase Error (Opens & Shorts): $\pm 3^\circ$ SWR of Loads: 1.06 typical at 1 GHz Mechanical Pin Depth: 0.000" to -0.010" (0 to -0.25 mm) Physical Dimensions: 251 $\times$ 142 $\times$ 67 mm Weight: Less than 1 kg Key Features Fixed terminations, open circuits, and short circuits in both genders Precision-machined offset opens and shorts with strong, low-dielectric-constant supports Broadband 50 Ω loads optimized for repeatability and durability One-piece offset short construction aligned to shorting plane Included torque wrench set to ~4 lb-inch for SMA connector integrity Typical Applications Network analyzer error correction and calibration verification Systematic error characterization across 50 Ω systems High-frequency device and component S-parameter measurement Transmission line and filter performance validation Compatibility & Integration Standard Accessories: Two thru adapters (male-male and female-female), SMA-to-APC-7 adapter pair, verification attenuator with measured S-parameters, torque wrench Optional Adapters: Reverse SMA, 3.5 mm connector variants (male-male, female-female, female-male), Type-N, 7 mm, and U.FL options VNA Compatibility: Broad support across Agilent/Keysight Vector Network Analyzer platforms

85033A Characteristics / Specifications

PARAMETER	VALUE
Model	85033A
Instrument Type	mechanical calibration kit
Connector Family	3.5 mm
Characteristic Impedance	50 Ohm
Host Analyzers Class	8753C and 8752A family
Standards Included	fixed terminations open circuits short circuits
Adapter Set Standard	precision 7 mm to 3.5 mm phase matched pair
Termination Frequency Spec Class	50 Ohm loads specified up to 26.5 GHz class OEM sheet
Network Analyzer Frequency Context Class	DC to 6 GHz class with 8753 family
Kit Variant 001 Function	deletes 7 mm to 3.5 mm adapters for 8752A use
Male Female Standards	both sexes included for insertable calibrations
Calibration Method	open short load
Connector Torque Class	90 N cm 8 in lb class 3.5 mm family
Operating Temperature Class	plus 15 C to plus 35 C class cal kit family
Storage Temperature Class	minus 40 C to plus 75 C class family
Humidity Type Tested Class	noncondensing laboratory environment
Related Successor Models	85033D to 6 GHz and 85033E to 9 GHz
Adapter Return Loss Class	precision adapters for non insertable devices
Phase Matching	adapters phase matched for thru calibration
Package Style	portable calibration kit case
Standard Count Class	opens shorts loads plus adapters
Intended Devices	3.5 mm and SMA DUTs
Test Set Compatibility	50 Ohm 8753 test sets
Calibration Traceability	factory characterized standards
Storage temperature	Class: minus 40 C to plus 75 C class family

PARAMETER

VALUE

Operating temperature

Class: plus 15 C to plus 35 C class cal kit family

Humidity

Type Tested Class: noncondensing laboratory environment

Return loss

Class: precision adapters for non insertable devices

85033A Specifications

PARAMETER	VALUE
Agilent 85033A 3.5 mm Mechanical Calibration Kit	Overview
Applications	OSL calibration of 3.5 mm and SMA devices with 8753C and 8752A network analyzers, and transfer of calibration through APC-7 adapters.
Key Features	Precision 3.5 mm open short load standards
Phase matched 7 mm to 3.5 mm adapters included	Kit variant without adapters for 8752A only configurations
Technical Specifications	Model: 85033A

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	Class: minus 40 C to plus 75 C class family
Operating temperature	Class: plus 15 C to plus 35 C class cal kit family
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Humidity	Type Tested Class: noncondensing laboratory environment
Operating Temperature Class	plus 15 C to plus 35 C class cal kit family
Storage Temperature Class	minus 40 C to plus 75 C class family
Humidity Type Tested Class	noncondensing laboratory environment
Related Successor Models	85033D to 6 GHz and 85033E to 9 GHz
Adapter Return Loss Class	precision adapters for non insertable devices
Phase Matching	adapters phase matched for thru calibration
Package Style	portable calibration kit case
Standard Count Class	opens shorts loads plus adapters
Intended Devices	3.5 mm and SMA DUTs
Test Set Compatibility	50 Ohm 8753 test sets
Calibration Traceability	factory characterized standards Notes From HP/Agilent 85033A operating literature and Keysight accessory descriptions for the 3.5 mm kit used with 8753C/8752A. Exact standard residual values belong on the kit characterization data supplied with the unit.

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

PARAMETER	VALUE
Model	85033A
Instrument Type	mechanical calibration kit
Connector Family	3.5 mm
Characteristic Impedance	50 Ohm
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Related Successor Models	85033D to 6 GHz and 85033E to 9 GHz
Adapter Return Loss Class	precision adapters for non insertable devices
Phase Matching	adapters phase matched for thru calibration
Package Style	portable calibration kit case
Standard Count Class	opens shorts loads plus adapters
Intended Devices	3.5 mm and SMA DUTs
Test Set Compatibility	50 Ohm 8753 test sets
Calibration Traceability	factory characterized standards

Notes

From HP/Agilent 85033A operating literature and Keysight accessory descriptions for the 3.5 mm kit used with 8753C/8752A. Exact standard residual values belong on the kit characterization data supplied with the unit.

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.