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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 85033C 3.5mm calibration kit for 8752A, 8753

Keysight 85033C 3.5 mm Mechanical Calibration Kit The Agilent/HP 85033C 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 85033C 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
85033C**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

85033C

LISTING

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

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 85033C is a 3.5mm precision calibration kit engineered for accurate RF and microwave measurements on Agilent/Keysight network analyzers. It has a complete set of meticulously manufactured standards - open, short, load, and thru - designed to minimize systematic measurement errors and verify test setup performance. Each standard is precisely characterized across a wide RF and microwave spectrum to support high-fidelity calibration of both male and female connector configurations. The kit reduces directivity, tracking, and reflection tracking errors, achieve measurement accuracy essential for RF circuit characterization, component verification, and system integration.

Technical Specifications

Calibration Standards

Open Standards: Precision-characterized open circuit standards for male and female 3.5mm connectors; de-embeds fixture effects and defines reference planes

Short Standards: High-quality short circuit standards for male and female 3.5mm connectors; critical for low-impedance measurement accuracy

Load Standards: 50-ohm matched loads for characterizing measurement system response under terminated conditions

Thru Standard: Low-loss, impedance-matched thru for transmission calibration

Connector Interface Type: 3.5mm (SMA variant)

Gender Configuration: Male and female standards included for multi-port calibration flexibility

Impedance: 50 ohms nominal

Precision: High-tolerance manufacturing to minimize connector repeatability errors and ensure accurate phase and amplitude response

Frequency Range

Operational frequency extends across the RF and microwave spectrum, determined by the paired network analyzer's capabilities.

Key Features

Addresses directivity, tracking, and reflection tracking errors through systematic calibration

Dual-gender connector standards enable calibration of diverse test port configurations

Low-loss standards maintain impedance consistency across operating bandwidth

Typical Applications

RF and microwave component characterization

Network analyzer verification and validation

Fixture de-embedding and reference plane establishment

High-accuracy S-parameter measurements

Compatibility & Integration

Compatible with Agilent 8752A, 8753A, 8753B, 8753C, 8753D and Keysight 8753E, 8753F, 8753ES, 8753ET network analyzers.

85033C Characteristics / Specifications

PARAMETER	VALUE
Model	85033C
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

85033C Specifications

PARAMETER	VALUE
Keysight 85033C 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: 85033C

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
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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 85033C 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	
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PARAMETER	VALUE
Model	85033C
Instrument Type	mechanical calibration kit
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Characteristic Impedance	50 Ohm
Host Analyzers Class	8753C and 8752A family
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Male Female Standards	both sexes included for insertable calibrations
Calibration Method	open short load
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Humidity Type Tested Class	noncondensing laboratory environment
Related Successor Models	85033D to 6 GHz and 85033E to 9 GHz
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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 85033C 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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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.