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Data Sheet
August 13, 2026

AGILENT / HP / KEYSIGHT

Agilent HP Keysight 85093C RF Electronic Calibration Module (ECal), 300 kHz to 9 GHz, 3.5 mm, 2 Port

Keysight Agilent 85093C RF Electronic Calibration Module 300 kHz to 9 GHz The Keysight (formerly Agilent) 85093C is a 2-port RF Electronic Calibration (ECal) module with 3.5 mm connectors covering 300 kHz to 9 GHz. Fully characterized electronic impedance states stored in module memory transfer NIST-traceable factory calibration to compatible ENA, PNA, and 8753-family network analyzers withasingle connection. The Keysight (formerly Agilent) 85093C is a 2-port RF Electronic Calibration (ECal) module with 3.5 mm connectors covering 300 kHz to 9 GHz. Fully characterized electronic impedance states stored in module memory transfer NIST-traceable factory calibration to compatible ENA, PNA, and 8753-family network analyzers withasingle connection.

MODEL Agilent / HP / Keysight 85093C	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU 85093C	LISTING https://aumictechlabs.com/products/85093c-2/

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent HP Keysight 85093C is a two-port RF electronic calibration module (ECal) that enables fast, accurate vector network analyzer calibrations across 300 kHz to 9 GHz. Operating through a single 3.5 mm connection, it delivers full two-port calibration in a single connection,

eliminating the complexity and setup time associated with traditional mechanical calibration kits. The module functions as a NIST-traceable transfer standard, conveying factory calibration accuracy directly to compatible network analyzers via USB control.Solid-state switching and fully traceable electronic impedance standards ensure repeatability better than 0.02 dB while reducing operator interaction and connector wear.Technical Specifications Frequency Range: 300 kHz to 9 GHz Port Impedance: 50 ohms Connector Type: 3.5 mm Insertion Loss: 30 dB VSWR: < 1.35:1 at 9 GHz Maximum Power: +26 dBm Measurement Accuracy: ± 0.1 dB + 0.2% of amplitude Calibration Accuracy: ± 0.1 dB + 0.2% of amplitude Phase Accuracy: ± 0.3 degrees Repeatability: < 0.02 dB Operating Temperature Range: 0 to 55 °C Dimensions: 44.1 cm × 22.6 cm × 5.1 cm Weight: 2.2 kgKey Features Full two-port calibration via single connection Supports simple non-insertable device calibration Reliable solid-state switching architecture USB interface control Reduced connector wear and operator errorCompatibility & Integration The 85093C integrates directly with Keysight PNA and ENA series network analyzers through USB control. Legacy 8753 and 8720 series systems with firmware revision 7.68 or higher support ECal module control via the 85097B interface kit. Mixed connector options including Type-N 50 ohm and 7-16 connectors are available for this ECal module family.

Features & description

From manufacturer datasheet

Features

• Single-connection full 2-port electronic calibration • Frequency coverage 300 kHz to 9 GHz • 3.5 mm connectors with gender options 00M 00F M0F • Mixed-connector options for Type-N 50 ohm and 7-16 • Up to five user characterizations plus factory data • Direct control from compatible PNA and ENA firmware

Applications

• Fast 2-port electronic calibration of RF VNAs to 9 GHz • Manufacturing and R&D calibration routines • Non-insertable calibrations with matched gender options • Mixed-connector calibrations with optioned port styles

85093C Characteristics / Specifications

PARAMETER	VALUE
Model	85093C
Manufacturer	Keysight / Agilent
Instrument Type	RF Electronic Calibration Module
Alias	85093C; Agilent 85093C; Keysight 85093C
Frequency range	300 kHz to 9 GHz
Port count	2
Connector type standard	3.5 mm
Family	85090 Series RF ECal
Maximum recommended input power	+9.0 dBm
Damage level typical	+20.0 dBm
Maximum DC on test port	plus or minus 20 V
Operating temperature	+20 C to +30 C
Directivity 300 kHz to 10 MHz	45 dB
Directivity 10 MHz to 1 GHz	52 dB
Directivity 1 to 3 GHz	52 dB
Directivity 3 to 6 GHz	50.5 dB
Directivity 6 to 9 GHz	47 dB
Source match 300 kHz to 10 MHz	36 dB
Source match 10 MHz to 1 GHz	44 dB
Source match 1 to 3 GHz	44 dB
Source match 3 to 6 GHz	39 dB
Source match 6 to 9 GHz	34 dB
Reflection tracking 300 kHz to 10 MHz	plus or minus 0.1 dB
Reflection tracking 10 MHz to 1 GHz	plus or minus 0.03 dB
Reflection tracking 1 to 3 GHz	plus or minus 0.04 dB

PARAMETER	VALUE
Reflection tracking 6 to 9 GHz	plus or minus 0.07 dB
Transmission tracking 300 kHz to 10 MHz	plus or minus 0.078 dB
Transmission tracking 10 MHz to 1 GHz	plus or minus 0.04 dB
Load match 10 MHz to 1 GHz	47 dB
Load match 6 to 9 GHz	40 dB
User characterizations stored	up to 5
Traceability	NIST via factory characterization Notes Corrected residual e-term specs from Agilent/Keysight ECal technical overview for 85093C (3.5 mm RF). Confirm connector gender option and host VNA firmware support.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	+20 C to +30 C
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Directivity 300 kHz to 10 MHz	45 dB
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Directivity 3 to 6 GHz	50.5 dB
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Source match 300 kHz to 10 MHz	36 dB
Source match 10 MHz to 1 GHz	44 dB
Source match 1 to 3 GHz	44 dB
Source match 3 to 6 GHz	39 dB
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Reflection tracking 10 MHz to 1 GHz	plus or minus 0.03 dB
Reflection tracking 1 to 3 GHz	plus or minus 0.04 dB
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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	85093C
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Source match 1 to 3 GHz	44 dB
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Reflection tracking 300 kHz to 10 MHz	plus or minus 0.1 dB
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Reflection tracking 1 to 3 GHz	plus or minus 0.04 dB
Reflection tracking 6 to 9 GHz	plus or minus 0.07 dB

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Transmission tracking 300 kHz to 10 MHz	plus or minus 0.078 dB
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Traceability	NIST via factory characterization

Notes
Corrected residual e-term specs from Agilent/Keysight ECal technical overview for 85093C (3.5 mm RF). Confirm connector gender option and host VNA firmware support.

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

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