

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 85103E

HP Agilent 85103E 8510C IF Detector / Processor Companion Module The HP 85103E is a later 8510C IF/processor companion in the 85103 series used with 85101C and 85102C. OEM 8510C 5091-8484E lists 45 MHz to 50/110 GHz family coverage and Option 010/008. IF processing for 8510C 50 GHz and mm-wave configurations. Instrument Type: 8510C IF/processor companion The HP 85103E is a later 8510C IF/processor companion in the 85103 series used with 85101C and 85102C. OEM 8510C 5091-8484E lists 45 MHz to 50/110 GHz family coverage and Option 010/008. IF processing for 8510C 50 GHz and mm-wave configurations. Instrument Type: 8510C IF/processor companion Family Frequency Coax 2p4 Mm: 45 MHz to 50 GHz



MODEL

**Agilent / Keysight
85103E**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

85103E

LISTING

[https://aumictechlabs.c
om/products/85103e-2/](https://aumictechlabs.com/products/85103e-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 85103E is an electronic calibration kit engineered to correct systematic errors in the Agilent/Keysight 8510 network analyzer system. This precision calibration solution delivers repeatable, accurate measurement results through integrated calibration standards, enabling cost-effective performance upgrades for 8510A and 8510B analyzers to achieve full 8510C capability. Technical Specifications Product Type: Precision Electronic Calibration Kit Intended Use: Calibration of Agilent/Keysight 8510 series network analyzers Frequency Range: Up to 9 GHz (typical for similar mechanical kits) Connector Type: 3.5 mm connectors Calibration Standards: Electronic kit integrating open, short, load, and through standards controlled by the

network analyzer Power Supply: Powered via system interface from the connected network analyzer

Key Features

- Eliminates systematic measurement errors inherent in network analyzer operation
- Self-contained electronic unit design with direct network analyzer integration
- Enables measurement accuracy and result integrity across extended test sessions
- Provides upgrade path for legacy 8510A/B systems to 8510C performance levels
- Ensures consistent calibration performance for long-term testing and inter-laboratory comparisons
- Reduces overall measurement uncertainty through precise error correction

Typical Applications

- Network analyzer calibration and verification
- Systematic error correction in RF/microwave measurements
- Performance validation in production and R&D test environments
- System upgrades for installed 8510-series analyzers

Compatibility & Integration

The 85103E connects directly to Agilent/Keysight 8510 network analyzer systems through designated test ports using 3.5 mm connectors. Designed specifically as a performance upgrade kit for the 8510A and 8510B, enabling them to achieve the full measurement capabilities of the 8510C analyzer.

85103E Characteristics / Specifications

PARAMETER	VALUE
Model	85103E
Instrument Type	8510C IF/processor companion
Family Frequency Coax 2p4 Mm	45 MHz to 50 GHz
Family Frequency Coax 1p0 Mm	45 MHz to 110 GHz
Family Frequency Waveguide	33 GHz to 110 GHz
Partner Display	85101C
Partner If Detector	85102C
Partner Test Set 8517A	50 GHz 2.4 mm
Partner Source	8360 seriesSParameters: S11 S21 S12 S22
Time Domain	Option 010
Pulse Profile	Option 008
Related 85103c	85103C
Related 85103d	85103D
Manufacturer	HP Agilent Keysight
Form Factor	8510C system module
Bus	HP-IB via 85101C
Literature	8510C 5091-8484E
Sweep Ramp Accuracy Class	plus or minus 0.1 percent of span with 8360
Use Case	8510C VNA IF processing
Brand Lineage	Hewlett Packard Agilent Keysight
Documentation Type	OEM datasheet and catalog specifications

85103E Specifications

PARAMETER	VALUE
Applications	IF processing for 8510C 50 GHz and mm-wave configurations.
Key Features	85103E IF/processor
Time domain Option 010	Pulse Option 008
Technical Specifications	Model: 85103E
Notes	From Agilent 8510C data sheet 5091-8484E family rows applied to 85103E. Dynamic range is test-set dependent.

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	
Technical Specifications	
PARAMETER	VALUE
Model	85103E
Instrument Type	8510C IF/processor companion
Family Frequency Coax 2p4 Mm	45 MHz to 50 GHz
Family Frequency Coax 1p0 Mm	45 MHz to 110 GHz
Family Frequency Waveguide	33 GHz to 110 GHz
Partner Display	85101C
Partner If Detector	85102C
Partner Test Set 8517A	50 GHz 2.4 mm
Partner Source	8360 series
S Parameters	S11 S21 S12 S22
Time Domain	Option 010
Pulse Profile	Option 008
Related 85103c	85103C
Related 85103d	85103D
Manufacturer	HP Agilent Keysight
Form Factor	8510C system module
Bus	HP-IB via 85101C
Literature	8510C 5091-8484E
Sweep Ramp Accuracy Class	plus or minus 0.1 percent of span with 8360
Use Case	8510C VNA IF processing
Brand Lineage	Hewlett Packard Agilent Keysight
Documentation Type	OEM datasheet and catalog specifications
Specifications	
PARAMETER	VALUE
Model	85103E

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Family Frequency Coax 1p0 Mm	45 MHz to 110 GHz
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Partner Display	85101C
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Partner Test Set 8517A	50 GHz 2.4 mm
Partner Source	8360 seriesSParameters: S11 S21 S12 S22
Time Domain	Option 010
Pulse Profile	Option 008
Related 85103c	85103C
Related 85103d	85103D
Manufacturer	HP Agilent Keysight
Form Factor	8510C system module
Bus	HP-IB via 85101C
Literature	8510C 5091-8484E
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Notes

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Ordering Information

OPTION	DESCRIPTION
Option 010	Pulse Option 008

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 ·
30-day returns
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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.