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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 85103D

HP Agilent 85103D 8510C IF Detector / Processor Companion Module The HP 85103D is a later 8510C IF/processor companion in the 85103 series. OEM 8510C 5091-8484E family coverage (45 MHz to 50 GHz 2.4 mm, 45 MHz to 110 GHz 1.0 mm, 33 to 110 GHz waveguide) applies to 85103D when used with 85101C and 85102C. IF processing in 8510C systems including 8517A and mm-wave. Instrument Type: 8510C IF/processor companion The HP 85103D is a later 8510C IF/processor companion in the 85103 series. OEM 8510C 5091-8484E family coverage (45 MHz to 50 GHz 2.4 mm, 45 MHz to 110 GHz 1.0 mm, 33 to 110 GHz waveguide) applies to 85103D when used with 85101C and 85102C. IF processing in 8510C systems including 8517A and mm-wave. Instrument Type: 8510C IF/processor companion Family Frequency Coax 2p4 Mm: 45 MHz to 50 GHz



MODEL

**Agilent / Keysight
85103D**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

85103D

LISTING

<https://aumictechlabs.com/products/85103d-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 85103D is a performance upgrade package that transforms the 8510B network analyzer into an 8510C-equivalent instrument. This upgrade delivers faster measurements, enhanced display capabilities, and advanced analytical functions for precise S-parameter characterization of RF and microwave components. The 85103D enables three times faster measurement speeds and unlocks firmware-based features including power sweep, receiver calibration, and time-domain analysis with improvements of two to sixteen times over

baseline performance. Technical Specifications Frequency range: 45 MHz to 110 GHz (depending on test set and synthesizer configuration) Receiver dynamic range: 86 dB to over 106 dB (band and configuration dependent) Time domain measurement speed: 2× to 16× faster than baseline Error-correction speed: 25% improvement Display: 16-color high-resolution screen Storage: 3.5-inch disk drive On-screen markers: Five readout positions Key Features Measurement speed increase of 3× compared to 8510B baseline Simultaneous four S-parameter display for streamlined analysis Power sweep functionality for device characterization under variable power levels Receiver calibration for improved nonlinear measurement accuracy Limit lines for automated pass/fail testing criteria Dissimilar connector compensation Full-color printer compatibility Measurement buffering for plots and printouts Internal real-time clock for timestamped data logging Enhanced printed data listings Typical Applications RF and microwave component characterization S-parameter measurements for device behavior analysis Nonlinear device testing with receiver calibration Time-domain reflectometry and impulse response measurement Automated production testing with limit line functionality Compatibility & Integration The 85103D upgrade integrates with Agilent/Keysight 8510 series network analyzers, specifically upgrading the 8510B to 8510C performance specifications. Frequency coverage extends based on the paired test set and synthesizer configuration.

85103D Characteristics / Specifications

PARAMETER	VALUE
Model	85103D
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 85103e	85103E
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

85103D Specifications

PARAMETER	VALUE
Applications	IF processing in 8510C systems including 8517A and mm-wave.
Key Features	85103D IF/processor
Option 010 time domain	Option 008 pulse
Technical Specifications	Model: 85103D
Notes	From Agilent 8510C data sheet 5091-8484E family rows applied to 85103D companion hardware. Confirm revision with 85102C/85101C pairing.

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	85103D
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 85103e	85103E
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	85103D

PARAMETER	VALUE
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
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Related 85103e	85103E
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

Notes

From Agilent 8510C data sheet 5091-8484E family rows applied to 85103D companion hardware. Confirm revision with 85102C/85101C pairing.

Ordering Information

OPTION	DESCRIPTION
Option 010	time domain

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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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.