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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 8593EM EMC Analyzer, 9 kHz to 22 GHz

The HP/Agilent 8593EM is a stand-alone 8590 EM Series EMC precompliance analyzer covering 9 kHz to 22 GHz. OEM 8590 C/E/L/Q and EM Series documentation lists EMI analysis and spectrum-analyzer modes in one portable instrument, with built-in amplitude correction and limit lines. Radiated and conducted EMI precompliance; microwave EMI precompliance to 22 GHz; general-purpose spectrum analysis without changing instruments. Dual EMI and spectrum-analyzer operating modes Built-in measurement routines for automated EMC scans Acoustic Noise Pressure: less than 37.5 dBA Form Factor: portable EMC analyzer based on 8590 E-series Tracking Generator Option Family: Optional tracking generator Option 010, 9 kHz to 2.9 GHz class EM Option 010 table Rf Output Frequency Range Option 010 Family: 100 kHz to 1.8 GHz on 8591EM; 9 kHz to 2.9 GHz on 8593EM/8595EM/8596EM Option 010 table



MODEL

**Agilent / Keysight
8593EM**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

8593EM

LISTING

<https://aumictechlabs.com/products/8593em-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 8593EM is a EMC analyzer operating from 9 kHz to 22 GHz, purpose-built for electromagnetic compatibility precompliance testing and radiated/conducted EMI measurements. The instrument combines spectrum analysis with automated EMC measurement

functions, identify, measure, and document emissions across products with clock frequencies up to 4.4 GHz. Dual-mode operation allows instant switching between EMI analysis and full-spectrum analysis modes via single key press, extending utility beyond EMC-only workflows.

Technical Specifications

Frequency Range: 9 kHz to 22 GHz Maximum Product Clock Frequency: 4.4 GHz (precompliance testing) Input Impedance: 50 ohms Video Bandwidth: 30 Hz to 3 MHz Resolution Bandwidth Steps: 1/3/10 Single Sideband Noise: -105 dBc/Hz to -90 dBc/Hz Signal Capacity: Automatic measurement, storage, and reporting of up to 239 signals

Key Features

Dual operational modes (EMI analysis and spectrum analysis) accessible via single-key selection CISPR band setup keys link predefined frequency bands with appropriate video and resolution bandwidths Built-in amplitude correction automatically compensates for antenna, amplifier, and cable losses Limit-line display enables simultaneous comparison against two regulatory limits plus user-defined measurement margin Predefined measurement routines for automated signal detection across specified frequency ranges Fully integrated automation eliminating requirement for external computer or software

Connectivity & Integration

HP-IB interface RS-232 interface Parallel printer port Local oscillator and sweep + tune outputs (rear panel)

Optional Capabilities

Tracking generator (to 1.8 GHz or 2.9 GHz), precision frequency reference, narrow resolution bandwidth (30 Hz, 100 Hz, 200 Hz, 300 Hz EMI), AM/FM demodulator with speaker/earphone jack, quasi-peak detector for automatic and manual EMC measurements, and time-gated spectrum analysis for time-domain signal separation.

Features & description

From manufacturer datasheet

Built-in measurement routines for automated EMC scans

Limit-line displays and transducer-factor corrections Optional tracking generator Option 010, 9 kHz to 2.9 GHz class EM Option 010 table Portable 8590 EM architecture (no external automation computer required) Technical Specifications Model: 8593EM Instrument Type: EMC precompliance analyzer Series Family: HP 8590 EM Series Frequency Range: 9 kHz to 22 GHz Emi Analysis Mode: built-in automated EMC precompliance (no external PC required) Spectrum Analysis Mode: full-function 8590 E-series spectrum analyzer via mode key Amplitude Correction: built-in correction for antenna, amplifier, and cable losses Limit Lines: limit-line displays for EMI masks Span Accuracy Span ≤ 10 MHz Times N: $\pm 2\%$ of span Span Accuracy Span Greater 10 MHz Times N: $\pm 3\%$ of span Residual Fm 1 KHz Rbw 8591 Class: ≤ 250 Hz pk-pk in 100 ms (8591E family table) Operating Temperature: 0 C to 55 C Storage Temperature: minus 40 C to +75 C Line Voltage: 90 to 132 or 198 to 264 V rms class E-series sheet Line Frequency: 47 to 66 Hz Power Consumption: less than 500 VA class E-series sheet Acoustic Noise Pressure: less than 37.5 dBA Zero Span: 0 Hz supported Remote Interface: HP-IB Form Factor: portable EMC analyzer based on 8590 E-series

8593EM Characteristics / Specifications

PARAMETER	VALUE
Model	8593EM
Instrument Type	EMC precompliance analyzer
Series Family	HP 8590 EM Series
Frequency Range	9 kHz to 22 GHz
Emi Analysis Mode	built-in automated EMC precompliance (no external PC required)
Spectrum Analysis Mode	full-function 8590 E-series spectrum analyzer via mode key
Amplitude Correction	built-in correction for antenna, amplifier, and cable losses
Limit Lines	limit-line displays for EMI masks
Span Accuracy Span Greater 10 MHz Times N	±3% of span
Residual Fm 1 Khz Rbw 8591 Class	≤250 Hz pk-pk in 100 ms (8591E family table)
Operating Temperature	0 C to 55 C
Storage Temperature	minus 40 C to +75 C
Line Voltage	90 to 132 or 198 to 264 V rms class E-series sheet
Line Frequency	47 to 66 Hz
Power Consumption	less than 500 VA class E-series sheet
Acoustic Noise Pressure	less than 37.5 dBA
Zero Span	0 Hz supported
Remote Interface	HP-IB
Form Factor	portable EMC analyzer based on 8590 E-series
Tracking Generator Option Family	Optional tracking generator Option 010, 9 kHz to 2.9 GHz class EM Option 010 table
Rf Output Frequency Range Option 010 Family	100 kHz to 1.8 GHz on 8591EM; 9 kHz to 2.9 GHz on 8593EM/8595EM/8596EM Option 010 table
Resolution Readout	four digits or 20 Hz times N, whichever greater
System Related Sidebands Offset Greater 30 Khz	≤ minus 65 dBc + 20 logNclass E-series

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 C to +75 C
Operating temperature	0 C to 55 C
Operating Temperature	0 C to 55 C
Line Voltage	90 to 132 or 198 to 264 V rms class E-series sheet
Line Frequency	47 to 66 Hz
Power Consumption	less than 500 VA class E-series sheet
Acoustic Noise Pressure	less than 37.5 dBA
Zero Span	0 Hz supported
Remote Interface	HP-IB
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Resolution Readout	four digits or 20 Hz times N, whichever greater
System Related Sidebands Offset Greater 30 Khz	$\leq$ minus 65 dBc + 20 logNclass E-series Notes Frequency span from Agilent 8590 C/E/L/Q and EM Series model table. Shared residual-FM, span-accuracy, environmental, and power rows from HP 8590 E-Series Portable Spectrum Analyzers product specifications (EM series is based on the E-series platform). Expand the exact EM verification-guide column before denser upload of detector/CISPR tables.

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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Instrument Type	EMC precompliance analyzer
Series Family	HP 8590 EM Series
Frequency Range	9 kHz to 22 GHz
Emi Analysis Mode	built-in automated EMC precompliance (no external PC required)
Spectrum Analysis Mode	full-function 8590 E-series spectrum analyzer via mode key
Amplitude Correction	built-in correction for antenna, amplifier, and cable losses
Limit Lines	limit-line displays for EMI masks
Span Accuracy Span ≤10 MHz Times N: ±2% of span	
Span Accuracy Span Greater 10 MHz Times N: ±3% of span	
Specifications	
PARAMETER	VALUE
Residual Fm 1 Khz Rbw 8591 Class	≤250 Hz pk-pk in 100 ms (8591E family table)
Operating Temperature	0 C to 55 C
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Notes

Frequency span from Agilent 8590 C/E/L/Q and EM Series model table. Shared residual-FM, span-accuracy, environmental, and power rows from HP 8590 E-Series Portable Spectrum Analyzers product specifications (EM series is based on the E-series platform). Expand the exact EM verification-guide column before denser upload of detector/CISPR tables.

Ordering Information

OPTION	DESCRIPTION
Option 010	Family: 100 kHz to 1.8 GHz on 8591EM; 9 kHz to 2.9 GHz on 8593EM/8595EM/8596EM Option 010 table

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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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.