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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 8596EM EMC Analyzer, 9 kHz to 12.8 GHz

The HP/Agilent 8596EM is a stand-alone 8590 EM Series EMC precompliance analyzer covering 9 kHz to 12.8 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; EMI precompliance through 12.8 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
8596EM**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

8596EM

LISTING

<https://aumictechlabs.com/products/8596em-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 8596EM EMC Analyzer is a stand-alone instrument for electromagnetic compatibility testing across 9 kHz to 12.8 GHz. It combines spectrum analysis with specialized EMC measurement capabilities, eliminating the need for external computers or automation

software. The analyzer performs radiated and conducted EMI detection, measurement, and documentation while supporting precompliance testing to commercial and MIL-STD requirements for devices with clock frequencies up to 2.5 GHz. Technical Specifications Frequency Range: 9 kHz to 12.8 GHz Maximum Clock Frequency (Precompliance Tests): 2.5 GHz Resolution Bandwidths (EMI): 9 kHz, 120 kHz (6 dB); 30 Hz, 100 Hz, 300 Hz (3 dB); 200 Hz (6 dB) Detectors: Peak, Quasi-Peak, EMI Average, RMS Average Limit Lines: Simultaneous comparison against two regulatory limits plus measurement margin Amplitude Correction: Automatic correction for antenna, amplifier, and cable losses Key Features Dual modes EMI analysis and spectrum analysis - switchable via front-panel keys Fully integrated automation with predefined CISPR band setup keys Predefined measurement routines for automatic frequency range sweeps Built on 8590 E-series spectrum analyzer architecture ROM-based measurement personalities for application-specific configuration (EMC, Cable TV, RF communication) Split-screen display capability with zoom functionality Typical Applications EMI emissions precompliance testing Electromagnetic interference diagnostics and documentation Radiated and conducted emissions measurement Compliance verification against commercial standards and MIL-STD requirements Spectrum analysis and interference identification Compatibility & Integration Interfaces: RS-232, parallel printer, optional GPIB/HPIB card Tracking Generator: Available as Option 010 for stimulus-response measurements and shielding effectiveness/immunity testing Standalone Operation: No external computer required for automated EMC measurements

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: 8596EM Instrument Type: EMC precompliance analyzer Series Family: HP 8590 EM Series Frequency Range: 9 kHz to 12.8 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

8596EM Characteristics / Specifications

PARAMETER	VALUE
Model	8596EM
Instrument Type	EMC precompliance analyzer
Series Family	HP 8590 EM Series
Frequency Range	9 kHz to 12.8 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
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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	$\leq$ 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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PARAMETER	VALUE
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Instrument Type	EMC precompliance analyzer
Series Family	HP 8590 EM Series
Frequency Range	9 kHz to 12.8 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
Storage Temperature	minus 40 C to +75 C
Line Voltage	90 to 132 or 198 to 264 V rms class E-series sheet
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System Related Sidebands Offset Greater 30 Khz	≤ 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.

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

Aumictech
788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
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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.