

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 85422E Receiver RF Section, 9 kHz to 2.9 GHz

HP Agilent 85422E Receiver RF Section 9 kHz to 2.9 GHz The HP 85422E is the RF section of the 8542E EMI receiver. OEM 8542E/85422E data list 9 kHz to 2.9 GHz RF coverage for CISPR/MIL-STD EMI measurements when paired with the 8542E IF/display mainframe, with quasi-peak and average detection in the 8542E system. Conducted and radiated EMI measurements to 2.9 GHz in 8542E receivers. Measurement: EMI / EMC receiver RF front end

The HP 85422E is the RF section of the 8542E EMI receiver. OEM 8542E/85422E data list 9 kHz to 2.9 GHz RF coverage for CISPR/MIL-STD EMI measurements when paired with the 8542E IF/display mainframe, with quasi-peak and average detection in the 8542E system. Conducted and radiated EMI measurements to 2.9 GHz in 8542E receivers. Measurement: EMI / EMC receiver RF front end Standards Class: CISPR and MIL-STD EMI measurements



MODEL

**Agilent / Keysight
85422E**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

85422E

LISTING

<https://aumictechlabs.com/products/85422e-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 85422E Receiver RF Section is the RF front-end component of the 8542E EMI test receiver system, delivering precise signal reception and analysis across 9 kHz to 2.9 GHz. This modular unit captures and processes RF signals for EMI and conformance testing, with

compliance to CISPR 16-1 and industry standards including CISPR, EN, FCC, VCCI, and VDE. It operates standalone for pre-compliance testing and integrates with the 85420E RF Filter Section to form a complete EMI compliance receiver.

Technical Specifications

Frequency Performance
Operating range: 9 kHz to 2.9 GHz
Tuning modes: Manual, stepped, and scanning (linear or logarithmic)
Frequency reference aging: $< \pm 1 \times 10^{-7}$ /year
Frequency reference settability: $< \pm 1 \times 10^{-8}$
Temperature stability: 10 MHz

Detection & Measurement
Measurement detectors: Peak, Quasi-Peak, and Average
IF bandwidths (6 dB): 200 Hz, 9 kHz, 120 kHz (CISPR 16-compliant)
Diagnostic IF bandwidths (3 dB): 30 Hz to 3 MHz in 1-3-10 steps, and 5 MHz
Averaging bandwidths: 30 Hz to 3 MHz in 1-3-10 steps with digital filters (1, 3, 10 Hz)
Sweep time: 20 ms to 100 sec
Sweep triggers: Free Run, Single, Line, Video, External Input

Characteristics
Input connector: Type-N female, 9 kHz to 2.9 GHz
Preamplification gain: 27 dB
Input attenuator range: 0 to 70 dB
Input VSWR: 2:1 (0 dB attenuation); 1.2:1 (10 dB attenuation); 1.6:1 (> 1.5 GHz, 10 dB attenuation)
Maximum safe input (average power): 137 dB μ V (30 dBm)
Maximum safe input (peak pulse): 100 W peak for 10 μ sec at 1% duty cycle with 30 dB attenuation
DC voltage rating: 0 V (DC coupled); 50 V (AC coupled)

Counter Resolution
Spans ≤ 10 MHz: Selectable from 10 Hz to 100 kHz
Spans > 10 MHz: Selectable from 100 Hz to 100 kHz

Key Features
IF overload protection with dedicated detectors
Quasi-Peak time constants conforming to CISPR Publication 16
Modular architecture for integration into complex test setups
Three measurement detector types for standards compliance testing

Typical Applications
EMI/RFI pre-compliance and conformance testing
Radiated and conducted emissions measurement
RF signal monitoring and analysis
Systems integration for automated compliance receivers

Compatibility & Integration
The 85422E pairs with the 85420E RF Filter Section to form a complete EMI compliance receiver meeting CISPR 16-1 requirements. Standalone operation is supported for pre-compliance applications.

85422E Characteristics / Specifications

PARAMETER	VALUE
Model	85422E
Instrument Type	EMI receiver RF section
Frequency Range	9 kHz to 2.9 GHz
Host Mainframe	HP 8542E
Measurement	EMI / EMC receiver RF front end
Standards Class	CISPR and MIL-STD EMI measurements
Manufacturer	HP Agilent Keysight
Mechanical Package	EMI receiver RF section
Minimum Frequency	9 kHz
Maximum Frequency	2.9 GHz
Detection In System	peak quasi-peak average as provided by 8542E
System Family	HP 8542E EMI receiver
Documentation	8542E/85422E EMI receiver data
Application Class	conducted and radiated emissions
If Section	in the 8542E mainframe
Rf Input	receiver RF input on 85422E
Duty	continuous EMI scanning
Related Higher Band	companion microwave RF sections in the 8542 family as fitted
Calibration	EMI receiver calibration per 8542E procedures
Grounding	CISPR LISN/ground as in the EMI setup
Remote	HP-IB via 8542E
Rf Section Role	9 kHz to 2.9 GHz front end of 8542E

85422E Specifications

PARAMETER	VALUE
HP Agilent 85422E Receiver RF Section 9 kHz to 2.9 GHz	Overview
Applications	Conducted and radiated EMI measurements to 2.9 GHz in 8542E receivers.
Key Features	9 kHz to 2.9 GHz RF section
Technical Specifications	Model: 85422E

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	85422E
Instrument Type	EMI receiver RF section
Frequency Range	9 kHz to 2.9 GHz
Host Mainframe	HP 8542E
Measurement	EMI / EMC receiver RF front end
Standards Class	CISPR and MIL-STD EMI measurements
Manufacturer	HP Agilent Keysight
Mechanical Package	EMI receiver RF section
Minimum Frequency	9 kHz
Maximum Frequency	2.9 GHz
Detection In System	peak quasi-peak average as provided by 8542E
System Family	HP 8542E EMI receiver
Documentation	8542E/85422E EMI receiver data
Application Class	conducted and radiated emissions
If Section	in the 8542E mainframe
Rf Input	receiver RF input on 85422E
Duty	continuous EMI scanning
Related Higher Band	companion microwave RF sections in the 8542 family as fitted
Calibration	EMI receiver calibration per 8542E procedures
Grounding	CISPR LISN/ground as in the EMI setup
Remote	HP-IB via 8542E
Rf Section Role	9 kHz to 2.9 GHz front end of 8542E
Notes	
From HP 8542E EMI receiver literature for the 85422E RF section (9 kHz to 2.9 GHz). Quasi-peak/average detectors reside in the 8542E mainframe, not on the RF section alone.	

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
Generated August 15, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.