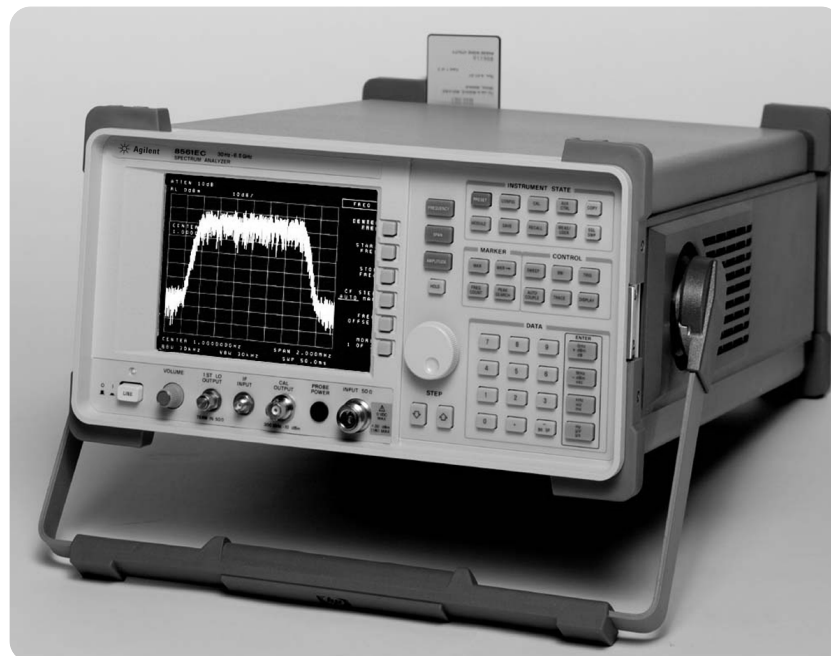


# Agilent 8560 EC-Series Spectrum Analyzers and Accessories

Configuration Guide



## Introduction

The Agilent Technologies 8560 EC-Series spectrum analyzers have a color display, offer standard digitized fast time domain sweeps (Option 856xEC-007 on the 8560 E-Series), and are Class 3 MIL-rugged. The 8560 EC-Series is identical to the 8560 E-Series in all other respects.

## Agilent 8560 EC-Series options

To add options to a product, use the following ordering scheme:

Model: 856xEC (x = 0, 1, 2, 3, 4, or 5)

Model option example: 856xEC-Option 001

**Agilent 8560EC RF Spectrum Analyzer**

(30 Hz to 2.9 GHz)

**Agilent 8561EC RF Spectrum Analyzer**

(30 Hz to 6.5 GHz)

**Agilent 8562EC RF Spectrum Analyzer**

(30 Hz to 13.2 GHz)

**Agilent 8563EC Microwave Spectrum Analyzer**

(9 kHz to 26.5 GHz)

**Agilent 8564EC Millimeter-wave Spectrum Analyzer**

(9 kHz to 40 GHz)

**Agilent 8565EC Millimeter-wave Spectrum Analyzer**

(9 kHz to 50 GHz)



**Agilent Technologies**

## Agilent 8560 EC-Series options

• = compatible options Std = standard configuration

Option	Description	8560EC	8561EC	8562EC	8563EC	8564EC	8565EC
<b>Frequency range</b>							
856x-006	Frequency coverage down to 30 Hz	Std	Std	Std	•	•	•
<b>Signal identification</b>							
856x-008	Adds signal identification <sup>11</sup>	•	•	•	•	•	•
<b>Frequency reference</b>							
856x-103	Delete precision frequency reference <sup>11</sup>	•	•	•	•	•	•
<b>Memory module</b>							
856x-104	Delete 85620A mass memory module	•	•	•	•	•	•
<b>Inputs and outputs</b>							
856x-001	Add second IF output, rear panel connector (310.7 MHz)	•	•	•	•	•	•
856x-005	Add alternate sweep output <sup>1</sup>	•	•	•	•	•	•
<b>Input connection</b>							
856x-026	APC 3.5 mm input connector				•		
<b>Tracking generator</b>							
856x-002	Add built-in tracking generator <sup>1</sup>	•					
<b>Refurbish unit</b>							
856x-RMKT	Refurbished spectrum analyzer (as available)	Contact an Agilent representative for availability					
<b>Calibration documentation</b>							
856x-UK6	Commercial calibration certificate with test data	•	•	•	•	•	•
<b>Accessories</b>							
856x-908	Rack mount kit without handles	•	•	•	•	•	•
856x-909	Rack mount kit with handles	•	•	•	•	•	•
856x-042	Gray spectrum analyzer backpack	•	•	•	•	•	•
856x-044	Yellow spectrum analyzer backpack	•	•	•	•	•	•
856xEC-B70	BenchLink spectrum analyzer software	•	•	•	•	•	•
<b>Documentation</b>							
856x-0B0	Delete manual set	•	•	•	•	•	•
856x-AB2	Chinese localization (user's guide and quick reference guide)	•	•	•	•	•	•
856x-ABD	German localization (user's guide and quick reference guide)	•	•	•	•	•	•
856x-ABE	Spanish localization (user's guide and quick reference guide)	•	•	•	•	•	•
856x-ABF	French localization (user's guide and quick reference guide)	•	•	•	•	•	•
856x-ABJ	Japanese localization (user's guide and quick reference guide)	•	•	•	•	•	•
856x-ABZ	Italian localization (user's guide and quick reference guide)	•	•	•	•	•	•
<b>Additional documentation</b>							
856x-915	Service guide (and component level information manual)	•	•	•	•	•	•
856x-910	Extra user's manual set (user's guide, calibration guide, mass memory module, manual, and quick reference guide)	•	•	•	•	•	•
856x-916	Extra pocket-sized quick reference guide (English)	•	•	•	•	•	•
<b>Warranty and service</b>							
R-51B	Return-to-Agilent warranty and service plan (For warranty and service of 5 years, please order 60 months of R-51B (quantity = 60). Standard warranty is 36 months.)	•	•	•	•	•	•
<b>Calibration<sup>9</sup></b>							
R-50C-001	Standard calibration (For 3 years, order 36 months of the appropriate calibration plan shown below. For 5 years, specify 60 months.)	•	•	•	•	•	•
R-50C-002	Standards compliant calibration (For 3 years, order 36 months of the appropriate calibration plan shown below. For 5 years, specify 60 months.)	•	•	•	•	•	•

## Agilent 8560 Series application measurement cards/measurement personalities<sup>2</sup>

• = compatible cards/personalities Std = standard configuration

Model	Description	8560EC	8561EC	8562EC	8563EC	8564EC	8565EC
85629B	Test and adjustment module	•	•	•	•	•	•
85671A	Phase noise measurements utility	•	•	•	•	•	•
85672A	Spurious response measurements utility	•	•	•	•	•	•
85710A	Digital radio measurements personality	• <sup>7</sup>	• <sup>7</sup>	•	•	•	•
85620A	Mass memory module	• <sup>10</sup>	• <sup>10</sup>	• <sup>10</sup>	• <sup>10</sup>	• <sup>10</sup>	• <sup>10</sup>

## Agilent 8560 Series measurement cards/measurement personalities options

Option	Description	8560EC	8561EC	8562EC	8563EC	8564EC	8565EC
<b>Documentation</b>							
85671A-ABZ	Italy - Italian localization (includes US English)	•	•	•	•	•	•
85672A-ABJ	Japan - Japanese localization (includes US English)	•	•	•	•	•	•
85672A-ABZ	Italy - Italian localization (includes US English)	•	•	•	•	•	•
85620A-ABF	France - French localization (includes US English)	•	•	•	•	•	•
85620A-ABJ	Japan - Japanese localization (includes US English)	•	•	•	•	•	•
85620A-ABZ	Italy - Italian localization (includes US English)	•	•	•	•	•	•
85620A-910	Extra user's manual set	•	•	•	•	•	•

## PC software

Model	Description	8560EC	8561EC	8562EC	8563EC	8564EC	8565EC
E4444A	BenchLink spectrum analyzer software	•	•	•	•	•	•

## Agilent 8560 EC-Series accessories

### For scalar measurements

**85640A** Tracking generator (300 kHz to 2.9 GHz)

**8721A** Directional bridge

**11852B** Option C04 50 to 75 ohm minimum loss pad

**86205A** 50 ohm bridge (300 kHz to 6 GHz)

### For extended frequency measurements

**11974A** Preselected mm mixer (26.5 GHz to 40 GHz)<sup>3,6</sup>

**11974Q** Preselected mm mixer (33 GHz to 50 GHz)<sup>3,6</sup>

**11974U** Preselected mm mixer (40 GHz to 60 GHz)<sup>3,6</sup>

**11974V** Preselected mm mixer (50 GHz to 75 GHz)<sup>3,6</sup>

**11970K** mm harmonic mixer (18 GHz to 26.5 GHz)<sup>3,5</sup>

**11970A** mm harmonic mixer (26.5 GHz to 40 GHz)<sup>3,5</sup>

**11970Q** mm harmonic mixer (33 GHz to 50 GHz)<sup>3,5</sup>

**11970U** mm harmonic mixer (40 GHz to 60 GHz)<sup>3,5</sup>

**11970V** mm harmonic mixer (50 GHz to 75 GHz)<sup>3,5</sup>

**11970W** mm harmonic mixer (75 GHz to 110 GHz)<sup>3,5</sup>

### Amplifiers and preamplifiers

**8447A** Preamplifier (100 kHz to 400 MHz, 20 dB gain)

**8447D** Preamplifier (100 kHz to 1.3 GHz, 25 dB gain)

**8449B** Preamplifier (1 GHz to 26.5 GHz, 30 dB gain)

**10855A** Broadband preamplifier (2 MHz to 1300 MHz, 22 dB gain)

**83006A** 10 MHz to 26.5 GHz preamplifier (20 dB gain)

**83051A** 45 MHz to 50 GHz preamplifier (23 dB gain)

## Printers

The printer compatibility guide is on-line at [www.agilent.com/find/pcg/](http://www.agilent.com/find/pcg/)

**ITEL-45 CHVUB** GPIB/parallel converter (North America, Japan, Korea, and Taiwan)

**ITEL-45 CHVEB** GPIB/parallel converter (continental Europe, U.K., Australia, and South Africa) (requires Agilent F1011A AC adapter)

**10833A** GPIB cable (1 meter)

**C2950A** Parallel printer cable (2 meters)

## Other accessories

**85620A** Mass memory module (standard on Agilent 8560 EC-Series)

**85629B** Test and adjustment module (limited use on Agilent 8562EC/64EC/65EC)

**85700A** 32-Kbyte RAM memory card<sup>2</sup>

**85702A** 128-Kbyte RAM memory card<sup>2</sup>

**85901A** Portable AC power source (for use with Agilent 8560EC/61EC/62E/63EC)

**85902A** Burst carrier trigger

**41800A** Active probe (5 Hz to 500 MHz)

**85024A** High frequency probe (300 kHz to 3 GHz)

**11945A** Close-field probes (with Option E51)

**11742A** High frequency blocking capacitor (3.5 mm (f to m), 45 MHz to 26.5 GHz, 0.35 dB IL < 12.4 GHz, 0.7 dB IL < 26.5 GHz)

- 5062-4841** Rack mount without handles (centers instrument in rack)<sup>4</sup>
- 5062-4840** Rack mount with handles (centers instrument in rack)<sup>4</sup>
- 5062-8241** Rack mount without handles (mounts instrument left of center)<sup>4</sup>
- 5062-8240** Rack mount with handles (mounts instrument left of center)<sup>4</sup>
- 1494-0060** Rack slide for rack mount
- 1420-0383** Memory card battery (CR 2016)
- 9211-5604** Transit case
- 08562-60021** Service accessory kit
- 1540-1130** Protective soft carrying case/backpack (same as Option 586x-042)
- 8120-6164** 50 GHz cable: 1 meter, 2.4 mm (f), and 2.4 mm (m) connectors
- 11693A** Limiter: type-N (f) to type-N (m), 0.1 GHz to 12.4 GHz, < 2 dB insertion loss

### Agilent 8560 EC-series manuals

- 08560-90112** 8560 EC-Series quick reference guide in English
- 5961-0435** 8560 EC-Series quick reference guide in French<sup>8</sup>
- 5961-0436** 8560 EC-Series quick reference guide in German<sup>8</sup>
- 5961-0437** 8560 EC-Series quick reference guide in Italian<sup>8</sup>
- 5961-0438** 8560 EC-Series quick reference guide in Spanish<sup>8</sup>
- 5961-6800** 8560 EC-Series quick reference guide in Chinese<sup>8</sup>
- 08560-90110** 8560 EC-Series user's guide in English
- 5961-6793** 8560 EC-Series user's guide in French<sup>8</sup>
- 5961-6794** 8560 EC-Series user's guide in German<sup>8</sup>
- 5961-6795** 8560 EC-Series user's guide in Italian<sup>8</sup>
- 5961-6796** 8560 EC-Series user's guide in Spanish<sup>8</sup>
- 08560-90117** 8560 EC-Series user's guide in Japanese<sup>8</sup>
- 5960-6550** 8560 EC-Series component level information manual<sup>8</sup>

### Notes

1. Options 856x-002 and 856x-005 are mutually exclusive.
2. 85620A required. 85620A includes one 32-Kbyte RAM card.
3. Not compatible with Option 856x-002 on the 8560EC.
4. Rack height is 8.75 inches.
5. Option 856x-008 on Agilent 8560 EC-Series recommended.
6. Option 856x-005 on Agilent 8560 EC-Series recommended.
7. Not all agency masks can be used with Agilent 8560EC and Agilent 8561EC.
8. Not available for the 8562EC.
9. Option not available in all countries.
10. Standard on the 856xEC series; may be purchased as an upgrade for older 856x spectrum analyzers.
11. Option 856x-008 and 856x-103 are mutually exclusive.

- 08560-90132** 8560 EC-Series calibration guide
- 08560-90111** 8560EC service guide
- 08563-90131** 8561EC/63EC service guide
- 08562-90209** 8562EC service guide
- 08564-90014** 8564EC/65EC service guide
- 85620-90041** 85620A installation, operation, programming and service manual

For user's training contact your local Agilent representative.

### Agilent Technologies' Test and Measurement Support, Services, and Assistance

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