



# 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 (previously, Option 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<sup>1</sup>**  
(30 Hz to 2.9 GHz)

**Agilent 8561EC RF spectrum analyzer<sup>2</sup>**  
(30 Hz to 6.5 GHz)

**Agilent 8562EC RF spectrum analyzer<sup>1</sup>**  
(30 Hz to 13.2 GHz)

**Agilent 8563EC microwave spectrum analyzer<sup>1</sup>**  
(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)

1. To be discontinued September 1, 2009

2. Discontinued product.



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## Agilent 8560 EC-Series options

• = compatible options Std = standard configuration

Option	Description	8560EC	8561EC	8562EC	8563EC	8564EC	8565EC
<b>Frequency range</b>							
856xEC-006	Frequency coverage down to 30 Hz	Std	Std	Std	•	•	•
<b>Signal identification</b>							
856xEC-008	Adds signal identification	•	•	•	•	•	•
<b>Frequency reference</b>							
856xEC-103	Delete precision frequency reference (discontinued option)	•	•	•	•	•	•
<b>Memory module</b>							
856xEC-104	Delete 85620A mass memory module	•	•	•	•	•	•
<b>Inputs and outputs</b>							
856xEC-001	Add second IF output, rear panel connector (310.7 MHz)	•	•	•	•	•	•
856xEC-005	Add alternate sweep output <sup>1</sup>	•	•	•	•	•	•
<b>Input connection</b>							
856xEC-026	APC 3.5 mm input connector				•		
<b>Refurbish unit</b>							
856xEC-RMKT	Refurbished spectrum analyzer (as available)	Contact an Agilent representative for availability					
<b>Calibration documentation</b>							
856xEC-UK6	Commercial calibration certificate with test data	•	•	•	•	•	•
<b>Accessories</b>							
856xEC-908	Rack mount kit without handles	•	•	•	•	•	•
856xEC-909	Rack mount kit with handles	•	•	•	•	•	•
856xEC-042	Gray spectrum analyzer backpack	•	•	•	•	•	•
856xEC-044	Yellow spectrum analyzer backpack	•	•	•	•	•	•
856xEC-B70	BenchLink spectrum analyzer software	•	•	•	•	•	•
<b>Documentation</b>							
856xEC-0B0	Delete manual set	•	•	•	•	•	•
856xEC-AB2	Chinese localization (user's guide and quick reference guide)	•	•	•	•	•	•
856xEC-ABD	German localization (user's guide and quick reference guide)	•	•	•	•	•	•
856xEC-ABE	Spanish localization (user's guide and quick reference guide)	•	•	•	•	•	•
856xEC-ABF	French localization (user's guide and quick reference guide)	•	•	•	•	•	•
856xEC-ABJ	Japanese localization (user's guide and quick reference guide)	•	•	•	•	•	•
856xEC-ABZ	Italian localization (user's guide and quick reference guide)	•	•	•	•	•	•
<b>Additional documentation</b>							
856xEC-915	Service guide (and component level information manual)	•	•	•	•	•	•
856xEC-910	Extra user's manual set (user's guide, calibration guide, mass memory module, manual, and quick reference guide)	•	•	•	•	•	•
856xEC-916	Extra pocket-sized quick reference guide (English)	•	•	•	•	•	•

## 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 (discontinued)	.7	.7	•	•	•	•
85620A	Mass memory module	.10	.10	.10	.10	.10	.10

## 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	•	•	•	•	•	•
<b>PC software</b>							
Model	Description	8560EC	8561EC	8562EC	8563EC	8564EC	8565EC
E4444A	BenchLink spectrum analyzer software	•	•	•	•	•	•

## Agilent 8560 EC-Series accessories

### For scalar measurements

<b>85640A</b>	Tracking generator (300 kHz to 2.9 GHz)
<b>8721A</b>	Directional bridge
<b>11852B</b>	Option C04 50 to 75 $\Omega$ minimum loss pad
<b>86205A</b>	50 $\Omega$ bridge (300 kHz to 6 GHz)

### For extended frequency measurements

<b>11974A</b>	Preselected mm mixer (26.5 GHz to 40 GHz) <sup>3,6</sup>
<b>11974Q</b>	Preselected mm mixer (33 GHz to 50 GHz) <sup>3,6</sup>
<b>11974U</b>	Preselected mm mixer (40 GHz to 60 GHz) <sup>3,6</sup>
<b>11974V</b>	Preselected mm mixer (50 GHz to 75 GHz) <sup>3,6</sup>
<b>11970K</b>	mm harmonic mixer (18 GHz to 26.5 GHz) <sup>3,5</sup>
<b>11970A</b>	mm harmonic mixer (26.5 GHz to 40 GHz) <sup>3,5</sup>
<b>11970Q</b>	mm harmonic mixer (33 GHz to 50 GHz) <sup>3,5</sup>
<b>11970U</b>	mm harmonic mixer (40 GHz to 60 GHz) <sup>3,5</sup>
<b>11970V</b>	mm harmonic mixer (50 GHz to 75 GHz) <sup>3,5</sup>
<b>11970W</b>	mm harmonic mixer (75 GHz to 110 GHz) <sup>3,5</sup>

### Amplifiers and preamplifiers

<b>8447A</b>	Preamplifier (100 kHz to 400 MHz, 20 dB gain)
<b>8447D</b>	Preamplifier (100 kHz to 1.3 GHz, 25 dB gain)
<b>8449B</b>	Preamplifier (1 GHz to 26.5 GHz, 30 dB gain)
<b>10855A</b>	Broadband preamplifier (2 to 1300 MHz, 22 dB gain)
<b>83006A</b>	10 MHz to 26.5 GHz preamplifier (20 dB gain)
<b>83051A</b>	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/)

<b>10833A</b>	GPIB cable (1 meter)
<b>C2950A</b>	Parallel printer cable (2 meters)

### Other accessories

<b>85620A</b>	Mass memory module (standard on Agilent 8560 EC-Series)
<b>85629B</b>	Test and adjustment module (limited use on Agilent 8562EC/64EC/65EC)
<b>85700A</b>	32-Kbyte RAM memory card <sup>2</sup> (discontinued)
<b>85702A</b>	128-Kbyte RAM memory card <sup>2</sup> (discontinued)
<b>85902A</b>	Burst carrier trigger
<b>41800A</b>	Active probe (5 Hz to 500 MHz)
<b>85024A</b>	High frequency probe (300 kHz to 3 GHz)
<b>11945A</b>	Close-field probes (with Option E51)
<b>11742A</b>	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)
<b>5062-4841</b>	Rack mount without handles (centers instrument in rack) <sup>4</sup>
<b>5062-4840</b>	Rack mount with handles (centers instrument in rack) <sup>4</sup>
<b>5062-8241</b>	Rack mount without handles (mounts instrument left of center) <sup>4</sup>
<b>5062-8240</b>	Rack mount with handles (mounts instrument left of center) <sup>4</sup>
<b>1494-0060</b>	Rack slide for rack mount
<b>1420-0383</b>	Memory card battery (CR 2016)
<b>9211-5604</b>	Transit case
<b>08562-60021</b>	Service accessory kit
<b>1540-1130</b>	Protective soft carrying case/backpack (same as Option 856x-042)
<b>8120-6164</b>	50 GHz cable: 1 meter, 2.4 mm (f), and 2.4 mm (m) connectors
<b>11693A</b>	Limiter: type-N (f) to type-N (m), 0.1 GHz to 12.4 GHz, < 2 dB insertion loss
<b>82357B</b>	USB/GPIB interface

## Agilent 8560 EC-Series manuals

<b>08560-90112</b>	8560 EC-Series quick reference guide in English
<b>5961-0435</b>	8560 EC-Series quick reference guide in French <sup>8</sup>
<b>5961-0436</b>	8560 EC-Series quick reference guide in German <sup>8</sup>
<b>5961-0437</b>	8560 EC-Series quick reference guide in Italian <sup>8</sup>
<b>5961-0438</b>	8560 EC-Series quick reference guide in Spanish <sup>8</sup>
<b>5961-6800</b>	8560 EC-Series quick reference guide in Chinese <sup>8</sup>
<b>08560-90110</b>	8560 EC-Series user's guide in English
<b>5961-6793</b>	8560 EC-Series user's guide in French <sup>8</sup>
<b>5961-6794</b>	8560 EC-Series user's guide in German <sup>8</sup>
<b>5961-6795</b>	8560 EC-Series user's guide in Italian <sup>8</sup>
<b>5961-6796</b>	8560 EC-Series user's guide in Spanish <sup>8</sup>
<b>08560-90117</b>	8560 EC-Series user's guide in Japanese <sup>8</sup>
<b>5960-6550</b>	8560 EC-Series component level information manual <sup>8</sup>
<b>08560-90132</b>	8560 EC-Series calibration guide
<b>08560-90111</b>	8560EC service guide
<b>08563-90131</b>	8561EC/63EC service guide
<b>08562-90209</b>	8562EC service guide
<b>08564-90014</b>	8564EC/65EC service guide
<b>85620-90041</b>	85620A installation, operation, programming and service manual

For user's training contact your local Agilent representative.

### Notes

- Options 856x-002 (discontinued option) and 856x-005 are mutually exclusive.
- 85620A required. 85620A includes one 32-Kbyte RAM card.
- Not compatible with Option 856x-002 (discontinued option) on the 8560EC.
- Rack height is 8.75 inches.
- Option 856x-008 on Agilent 8560 EC-Series recommended.
- Option 856x-005 on Agilent 8560 EC-Series recommended.
- Not all agency masks can be used with Agilent 8560EC and Agilent 8561EC.
- Not available for the 8562EC.
- Option not available in all countries.
- Standard on the 856xEC Series; may be purchased as an upgrade for older 856x spectrum analyzers.



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