



Agilent ESA/EMC Spectrum Analyzer

Configuration Guide



This configuration guide will help you optimize an ESA/EMC analyzer for your application, and shows upgrade paths for adding options after the purchase of the instrument. Use Table 1 to determine availability and compatibility of options. For additional product and application information, please see the information list at the end of this guide.



Agilent Technologies

Models

- E4401B ESA-E Series Spectrum Analyzer (9 kHz to 1.5 GHz)
- E4402B ESA-E Series Spectrum Analyzer (100 Hz^{1,4} to 3 GHz)
- E4403B ESA-L Series Spectrum Analyzer (9 kHz to 3 GHz)
- E4404B ESA-E Series Spectrum Analyzer (100 Hz^{1,4} to 6.7 GHz)
- E4405B ESA-E Series Spectrum Analyzer (100 Hz^{1,4} to 13.2 GHz)
- E4407B ESA-E Series Spectrum Analyzer (100 Hz^{1,4} to 26.5 GHz)
- E4408B ESA-L Series Spectrum Analyzer (9 kHz to 26.5 GHz)
- E4411B ESA-L Series Spectrum Analyzer (9 kHz to 1.5 GHz)
- E7401A EMC Analyzer (9 kHz to 1.5 GHz)³
- E7402A EMC Analyzer (30^{1,2} Hz to 3 GHz)³
- E7403A EMC Analyzer (30^{1,2} Hz to 6.7 GHz)³
- E7404A EMC Analyzer (30^{1,2} Hz to 13.2 GHz)³
- E7405A EMC Analyzer (30^{1,2} Hz to 26.5 GHz)³

Ordering information

Options

To add options to an ESA, use the following ordering scheme:

Model: E44xxB
(xx = 01, 02, 03, 04, 05, 07, 08 or 11)

Model Options: E44xxB-Option (Option = 3 character option designation)

To add options to an EMC analyzer, use the following ordering scheme:

Model: E740xA (X = 1, 2, 3, 4 or 5)

Model options: E740xA-Option (Option = 3 character option designator)

Upgrading a model

Some options that you choose not to purchase with your instrument can be added later. To order upgrade options, add a “U” to the model number of the instrument to be upgraded, and specify the options you wish to add.

Upgrade notes

- **Additional options can be added as shown in Table 1, an “R” indicates a retrofit is available.**
- **For any upgrades not listed, please contact your Agilent sales representative for a special quote.**
- **Upgrade options are customer installable unless otherwise indicated.**

Upgrading an Agilent E4411A

If you have an E4411A and want to upgrade to a B model, contact your Agilent sales representative for a trade-in quote.

1. Optional

2. Characteristic

3. Includes peak, quasi-peak, and average detection standard.

4. 30 Hz characteristic

Table 1.
Option availability and compatibility

	ESA-L series			ESA-E series					E7400A EMC series					Requires	Not compatible with the following option(s)
	E4411B 1.5 GHz	E4403B 3 GHz	E4408B 26.5 GHz	E4401B 1.5 GHz	E4402B 3 GHz	E4404B 6.7 GHz	E4405B 13.2 GHz	E4407B 26.5 GHz	E7401A 1.5 GHz	E7402A 3 GHz	E7403A 6.7 GHz	E7404A 13.2 GHz	E7405A 26.5 GHz		
Available card slots	n/a	n/a	n/a	6	6	5	5	5	4	4	3	3	3		
Performance															
Narrow resolution bandwidths for better resolving power (100 Hz) <input type="checkbox"/> Option 1DR	R ²	R ²	R ²	R ²	R ²	R ²	R ²	R ²	S	S	S	S	S		
Narrow resolution bandwidths for better resolving power (10 Hz) ¹ <input type="checkbox"/> Option 1DR				R ²	R ²	R ²	R ²	R ²	S	S	S	S	S		
Narrow resolution bandwidths for resolving power (1 Hz, 3 Hz) ¹ <input type="checkbox"/> Option 1DR				R ²	R ²	R ²	R ²	R ²	S	S	S	S	S	Option1D5	
Preamplifier built-in for enhanced sensitivity ¹ <input type="checkbox"/> Option 1DS				R ³	R ³	R ³	R ³	R ³	S	S	S	S	S		
High stability frequency reference ¹ <input type="checkbox"/> Option 1D5				R ³	R ⁴	R ⁴	R ⁴	R ⁴	R ³	R ⁴	R ⁴	R ⁴	R ⁴		
ACPR dynamic range extension <input type="checkbox"/> Option 120					R ²	R ²	R ²	R ²						One available card slot	
100 Hz (30 Hz useable) frequency range extension <input type="checkbox"/> Option UKB					R ³	R ³	R ³	R ⁴		R ³	R ³	R ³	R ⁴	1DR	
External mixing (to 325 GHz) <input type="checkbox"/> Option AYZ								R ⁴						External mixer and two SMA cables (5061-5458)	
Fast time domain sweep plus functionality of Option A4J <input type="checkbox"/> Option AYX				R ²	R ²	R ²	R ²	R ²	R ²	R ²	R ²	R ²	R ²	One available card slot	Options A4J, B7D, B74, 304
APC 3.5 mm input connector <input type="checkbox"/> Option BAB			R ⁵					R ⁵					R ⁴		
Memory extension to 10 MB <input type="checkbox"/> Option B72	S ^{2,6,8}	S ^{2,6,8}	S ^{2,6,8}	S ^{2,6,8}	S ^{2,6,8}	S ^{2,6,8}	S ^{2,6,8}	S ^{2,6,8}	S	S	S	S	S		
Performance bundle is Options 1DR, 1DS and 1D5 <input type="checkbox"/> Option B75				X	X	X	X	X							
Low emissions shielding <input type="checkbox"/> Option 060				R ³	R ³	R ³	R ³	R ³	S	S	S	S	S		Options B7B, 1DP
Flexible Demodulation															
ESA to 89601A vector signal analysis software link utility <input type="checkbox"/> Option 231⁷					R	R	R	R						B7D, B7E, A4H 1D5 and B72 ⁸ (or B74 and A4H)	Options 229, AYX
Modulation analysis															
Modulation analysis measurement personality <input type="checkbox"/> Option 229⁷					R	R	R	R						Options B7D, B7E, 1D5 and B72 ⁸ or B74	Option 231
RF and digital comms hardware bundle includes Options B7D, B7E, 1D6, 1D5, 1DR, 1DS, B72 ⁸ <input type="checkbox"/> Option B74⁹					R ³	R ³	R ³	R ³						Two available card slots	Option AYX
Digital processing and fast ADC <input type="checkbox"/> Option B7D⁹					R ³	R ³	R ³	R ³						Options B7E, 1D5, and one available card slot	Option AYX
RF communications hardware <input type="checkbox"/> Option B7E⁹					R ³	R ³	R ³	R ³						Options B7D, 1D5 and one available card slot	
Bluetooth															
Bluetooth premium bundle including Options 228, 106, B7D, B7E, B72 ⁸ , 1DS, 1D5 <input type="checkbox"/> Option 304					R ⁴	R ⁴	R ⁴	R ⁴						Three available card slots	Options BAA, B7B, AYX
Bluetooth measurement personality <input type="checkbox"/> Option 228					R	R	R	R						(Minimum) Options 106, B72 ⁸ , AYX	
Bluetooth FSK demodulator <input type="checkbox"/> Option 106					R ²	R ²	R ²	R ²						(Minimum) Options 228, B72 ⁸ , AYX and one available card slot	Options BAA, B7B
Digital signal processing and fast ADC <input type="checkbox"/> Option B7D⁹					R ³	R ³	R ³	R ³						Options B7E, 1D5 and one available card slot	Option AYX
RF communication hardware <input type="checkbox"/> Option B7E⁹					R ³	R ³	R ³	R ³						Options B7D, 1D5 and one available card slot	

Blank	Not available for model.
X	Available only at time of new instrument purchase.
S	Standard.
R	Available at time of purchase or as a retrofit. Customer installation except where noted.

1. See also performance bundle Option B75.
2. Retrofit requires post verification test.
3. Retrofit requires post verification test and adjustments (Option OBW required).
4. Retrofit by Agilent factory only.
5. Retrofit by Agilent service center only.
6. Option B72 is available as an upgrade and is required when upgrading to firmware revision A.08.00 and above.
7. Functionality of 231 is included in Option 229. A4H must be ordered to take advantage of Link to 89601A VSA software.
8. Option B72 is standard if the serial prefix number is equal to or greater than US4144 or MY4144.
9. Fast ADC functionality of AYX is included in Options B7D, B7E, and B74. IF, video, & sweep ports functionality is not included.

Table 1.
Option availability and compatibility
(continued)

	ESA-L series			ESA-E series				E7400A EMC series					Requires	Not compatible with the following option(s)		
	E4411B 1.5 GHz	E4403B 3 GHz	E4408B 26.5 GHz	E4401B 1.5 GHz	E4402B 3 GHz	E4404B 6.7 GHz	E4405B 13.2 GHz	E4407B 26.5 GHz	E7401A 1.5 GHz	E7402A 3 GHz	E7403A 6.7 GHz	E7404A 13.2 GHz			E7405A 26.5 GHz	
cdmaOne																
cdmaOne measurement personality <input type="checkbox"/> Option BAC					R	R	R	R							Option B72 ¹	
RF and digital comms hardware bundle includes Options B7D, B7E, 1D6, 1D5, 1DR, 1DS, B72 ¹ <input type="checkbox"/> Option B74²					R3	R3	R3	R3							Two available card slots	Option AYX
Digital signal processing and fast ADC <input type="checkbox"/> Option B7D²					R4	R4	R4	R4							Options B7E, 1D5 and one available card slot	Option AYX
RF communications hardware <input type="checkbox"/> Option B7E					R4	R4	R4	R4							Options B7D, 1D5 and one available card slot	
Cable fault measurement personality <input type="checkbox"/> Option 225				R	R	R	R	R							Option 1DN or 1DQ and B72 ¹	
Cable fault location accessory kit (50 Ohm) <input type="checkbox"/> Option B7K				R	R	R	R	R							Options 1DN, 225	Options 1DP, 1DQ
50 Ohm tracking generator <input type="checkbox"/> Option 1DN	R5	R5	R5	R5	R5	R5	R5	R5	R5	R5	R5	R5	R5	R5		Options 1DP, 1DQ
GSM/GPRS																
GSM/GPRS measurement personality plus functionality of Option 225 <input type="checkbox"/> Option BAH					R	R	R	R							Options B72 ¹ , 1D6	
RF and digital comms hardware bundle includes Options B7D, B7E, 1D6, 1D5, 1DR, 1DS, B72 ¹ <input type="checkbox"/> Option B74²					R3	R3	R3	R3							Two available card slots	Option AYX
Digital processing and fast ADC <input type="checkbox"/> Option B7D²					R4	R4	R4	R4							Options B7E, 1D5 and one available card slot	Option AYX
RF communications hardware <input type="checkbox"/> Option B7E²					R4	R4	R4	R4							Options B7D, 1D5 and one available card slot	
Cable fault location accessory kit (50 Ohm) <input type="checkbox"/> Option B7K				R	R	R	R	R							Options 1DN, 225	Options 1DP, 1DQ
50 Ohm tracking generator <input type="checkbox"/> Option 1DN	R5	R5	R5	R5	R5	R5	R5	R5	R5	R5	R5	R5	R5	R5		Options 1DP, 1DQ
Component test																
50 Ohm tracking generator (9 kHz to 1.5 GHz) <input type="checkbox"/> Option 1DN	R5			R5					R5							Options 1DP, 1DQ
50 Ohm tracking generator (9 kHz to 3 GHz) <input type="checkbox"/> Option 1DN		R5	R5		R5	R5	R5	R5		R5	R5	R5	R5			Options 1DP, 1DQ
75 Ohm tracking generator (1 MHz to 1.5 GHz) <input type="checkbox"/> Option 1DQ	R5			R5											Option 1DP	Option 1DN
Phase noise measurement personality <input type="checkbox"/> Option 226				R	R	R	R	R							Option B72 ¹	
Noise figure																
Noise figure measurement personality and hardware <input type="checkbox"/> Option 219				R5	R5	R5	R5	R5							Option 1DS ⁶	Options 1DP, 1DQ
Preamplifier built-in for enhanced sensitivity ⁶ <input type="checkbox"/> Option 1DS				R4	R4	R4	R4	R4	S	S	S	S	S			
Low emissions shielding <input type="checkbox"/> Option 060				R4	R4	R4	R4	R4	S	S	S	S	S			Options B7B, 1DP

Blank	Not available for model.
X	Available only at time of new instrument purchase.
S	Standard.
R	Available at time of purchase or as a retrofit. Customer installation except where noted.

- Option B72 is standard if the serial prefix number is equal to or greater than US4144 or MY4144.
- Fast ADC functionality of AYX is included in Options B7D, B7E, and B74. IF, video, and sweep ports functionality is not included.
- Retrofit by Agilent factory only.
- Retrofit requires post verification test and adjustments (Option OBW required).
- Retrofit requires post verification test.
- See also performance bundle Option B7S.

Table 1.
Option availability and compatibility
(continued)

	ESA-L series			ESA-E series					E7400A EMC series					Requires	Not compatible with the following option(s)
	E4411B 1.5 GHz	E4403B 3 GHz	E4408B 26.5 GHz	E4401B 1.5 GHz	E4402B 3 GHz	E4404B 6.7 GHz	E4405B 13.2 GHz	E4407B 26.5 GHz	E7401A 1.5 GHz	E7402A 3 GHz	E7403A 6.7 GHz	E7404A 13.2 GHz	E7405A 26.5 GHz		
Cable TV															
Cable TV service and installation measurement personality <input type="checkbox"/> Option 227				R	R	R	R	R							Option B721
Cable fault location measurement personality <input type="checkbox"/> Option 225				R	R	R	R	R							Option 1DN or 1DQ and B721
FM demodulation/deviation <input type="checkbox"/> Option BAA				R2	R2	R2	R2	R2	S3	S3	S3	S3	S3	One available card slot	Options 106, 304
TV trigger and picture on screen <input type="checkbox"/> Option B7B				R2	R2	R2	R2	R2						Option BAA	Options 106, 304
Fast time domain sweeps, plus functionality of A4J <input type="checkbox"/> Option AYX				R2	R2	R2	R2	R2	R2	R2	R2	R2	R2	One available card slot	Options A4J, B7D, B74, 304
RF and digital comms hardware bundle, includes Options B7D, B7E, 1D6, 1D5, 1DR, 1DS, B72 <input type="checkbox"/> Option B744				R5	R5	R5	R5	R5						Two available card slots	Option AYX
IF, sweep, and video output ports <input type="checkbox"/> Option A4J	R2	R2	R2	R2	R2	R2	R2	R2	R2	R2	R2	R2	R2	One available card slot (for ESA-E and E7400A)	Option AYX6
75 Ohm input impedance <input type="checkbox"/> Option 1DP	X			X											Option 060
50 to 75 Ohm minimum loss pad <input type="checkbox"/> Option 1D7	R	R	R	R	R	R	R	R	R	R	R	R	R		
Pre-amplifier built-in <input type="checkbox"/> Option 1DS				R5	R5	R5	R5	R5	S	S	S	S	S		
GPIB and parallel printer interfaces <input type="checkbox"/> Option A4H7	R2	R2	R2	R2	R2	R2	R2	R2	S	S	S	S	S	One available card slot (for ESA-E and E7400A)	Option 1AX
RS-232 and parallel printer interfaces <input type="checkbox"/> Option 1AX7	R2	R2	R2	R2	R2	R2	R2	R2	R2.8	R2.8	R2.8	R2.8	R2.8	One available card slot (for ESA-E and E7400A)	Option A4H
Portability															
12 Vdc power cable <input type="checkbox"/> Option A5D	R	R	R	R	R	R	R	R	R	R	R	R	R		
Hard transit case <input type="checkbox"/> Option AXT	R	R	R	R	R	R	R	R	R	R	R	R	R		
Soft carrying /operation vase (gray) <input type="checkbox"/> Option AYT	R	R	R	R	R	R	R	R	R	R	R	R	R		
Soft carrying /operation vase (yellow) <input type="checkbox"/> Option AYU	R	R	R	R	R	R	R	R	R	R	R	R	R		
Custom Backpack (gray) <input type="checkbox"/> Option 042	R	R	R	R	R	R	R	R	R	R	R	R	R		
Custom Backpack (yellow) <input type="checkbox"/> Option 044	R	R	R	R	R	R	R	R	R	R	R	R	R		
Front panel cover <input type="checkbox"/> Option UK9	R	R	R	R	R	R	R	R	R	R	R	R	R		
PC Connectivity															
GPIB and parallel printer interfaces <input type="checkbox"/> Option A4H7	R2	R2	R2	R2	R2	R2	R2	R2	S	S	S	S	S	Available card slot (for ESA-E and E7400A)	Option 1AX
RS-232 and parallel printer interfaces <input type="checkbox"/> Option 1AX7	R2	R2	R2	R2	R2	R2	R2	R2	R2.8	R2.8	R2.8	R2.8	R2.8	Available card slot (for ESA-E and E7400A)	Option A4H
IntuiLink PC connectivity software <input type="checkbox"/> Standard	S	S	S	S	S	S	S	S	S	S	S	S	S		
BenchLink spectrum analyzer, PC software (Agilent E4444A) <input type="checkbox"/> Option B70	R	R	R	R	R	R	R	R						Option A4H or Option 1AX	
BenchLink web remote control software <input type="checkbox"/> Option 230	R	R	R	R	R	R	R	R	R	R	R	R	R	Option A4H	

Blank	Not available for model.
X	Available only at time of new instrument purchase.
S	Standard.
R	Available at time of purchase or as a retrofit. Customer installation except where noted.

- Option B72 is standard if the serial prefix number is equal to or greater than US4144 or MY4144.
- Retrofit requires post verification test.
- FM and AM demodulation capability similar to Option BAA is standard. See Agilent E7401A technical specifications for differences.
- Fast ADC functionality of AYX is included in Options B7D, B7E, and B74. IF, video, and sweep ports functionality is not included.
- Retrofit requires post verification test and adjustments (Option OBW required).
- Option AYX includes functionality of A4J
- Option A4H or 1AX must be ordered at time of purchase.
- This is not compatible with Agilent E7415A EM1 software.

Table 1.
Option availability and compatibility
(continued)

	ESA-L series			ESA-E series				E7400A EMC series					Requires	Not compatible with the following option(s)	
	E4411B 1.5 GHz	E4403B 3 GHz	E4408B 26.5 GHz	E4401B 1.5 GHz	E4402B 3 GHz	E4404B 6.7 GHz	E4405B 13.2 GHz	E4407B 26.5 GHz	E7401A 1.5 GHz	E7402A 3 GHz	E7403A 6.7 GHz	E7404A 13.2 GHz			E7405A 26.5 GHz
Pulsed measurements															
Time-gated spectrum analysis <input type="checkbox"/> Option 1D6				R ¹	R ¹	R ¹	R ¹	R ¹	X	X	X	X	X		
FM demodulation/deviation <input type="checkbox"/> Option BAA				R ¹	R ¹	R ¹	R ¹	R ¹	S ²	S ²	S ²	S ²	S ²	One available card slot	Options 106, 304
TV trigger and picture on screen <input type="checkbox"/> Option B7B				R ¹	R ¹	R ¹	R ¹	R ¹						Option BAA	Options 106, 304
Fast time domain sweep plus functionality of Option A4J <input type="checkbox"/> Option AYX				R ¹	R ¹	R ¹	R ¹	R ¹	R ¹	R ¹	R ¹	R ¹	R ¹	One available card slot	Option A4J, B7D, B74, 304
50 to 75 Ohm minimum loss pad <input type="checkbox"/> Option 1D7	R	R	R	R	R	R	R	R	R	R	R	R	R		
75 Ohm input impedance <input type="checkbox"/> Option 1DP	X			X											Option 060
If, sweep, and video output ports <input type="checkbox"/> Option A4J	R ¹	R ¹	R ¹	R ¹	R ¹	R ¹	R ¹	R ¹	R ¹	R ¹	R ¹	R ¹	R ¹	One available card slot (for ESA-E and E7400A)	Option AYX ³
Peripherals and accessories															
Rackmount and handle kit with slides <input type="checkbox"/> Option 1CP	R	R	R	R	R	R	R	R	R	R	R	R	R		
Documentation															
Add manual set <input type="checkbox"/> Option 0B1	R	R	R	R	R	R	R	R	X	X	X	X	X		
Commercial calibration certificate with test data <input type="checkbox"/> Option UK6	X	X	X	X	X	X	X	X	X	X	X	X	X		
Delete manual set (retains CD-Rom version) <input type="checkbox"/> Option 0B0	X	X	X	X	X	X	X	X	X	X	X	X	X		
Service documentation, component level CLIP (component level information package) <input type="checkbox"/> Option 0BV	R	R	R	R	R	R	R	R							
Service documentation, assembly level (performance verification and adjustment software included) <input type="checkbox"/> Option 0BW	R	R	R	R	R	R	R	R							

Blank	Not available for model.
X	Available only at time of new instrument purchase.
S	Standard.
R	Available at time of purchase or as a retrofit. Customer installation except where noted.

1. Retrofit requires post verification test.
2. FM and AM demodulation capability similar to Option BAA is standard. See Agilent E7401A technical specifications for differences.
3. Option AYX includes functionality of Option A4J.

Table 1.
Option availability and compatibility

	ESA-L series			ESA-E series				E7400A EMC series					Requires	Not compatible with the following option(s)	
	E4411B 1.5 GHz	E4403B 3 GHz	E4408B 26.5 GHz	E4401B 1.5 GHz	E4402B 3 GHz	E4404B 6.7 GHz	E4405B 13.2 GHz	E4407B 26.5 GHz	E7401A 1.5 GHz	E7402A 3 GHz	E7403A 6.7 GHz	E7404A 13.2 GHz			E7405A 26.5 GHz
Warranty, service and calibration options															
Standard calibration ¹	X	X	X	X	X	X	X	X	X	X	X	X	X		
<input type="checkbox"/> Option R-50C-001															
Standards compliant calibration ¹	X	X	X	X	X	X	X	X							
<input type="checkbox"/> Option R-50C-002															
Return-to-Agilent warranty and service plan ²	X	X	X	X	X	X	X	X	X	X	X	X	X		
<input type="checkbox"/> Option R-51B															
Localization															
Taiwan-Chinese user's guide	R	R	R	R	R	R	R	R							
<input type="checkbox"/> Option AB0															
Korea-Korean user's guide	R	R	R	R	R	R	R	R							
<input type="checkbox"/> Option AB1															
China-Chinese user's guide	R	R	R	R	R	R	R	R							
<input type="checkbox"/> Option AB2															
Germany-German user's guide	R	R	R	R	R	R	R	R							
<input type="checkbox"/> Option ABD															
Spain-Spanish user's guide	R	R	R	R	R	R	R	R							
<input type="checkbox"/> Option ABE															
France-French user's guide	R	R	R	R	R	R	R	R							
<input type="checkbox"/> Option ABF															
Japan-Japanese user's guide	R	R	R	R	R	R	R	R							
<input type="checkbox"/> Option ABJ															
Italy-Italian user's guide	R	R	R	R	R	R	R	R							
<input type="checkbox"/> Option ABZ															
Russia-Russian user's guide	R	R	R	R	R	R	R	R							
<input type="checkbox"/> Option ABT															
Firmware/software															
Firmware upgrade	U	U	U	U	U	U	U	U	U	U	U	U	U	B723.5	
<input type="checkbox"/> Option UE2															
ESA to 89601A vector signal analysis software link utility					R	R	R	R						B7D, B7E,A4H 1D5 and B72 ⁴ (or B74 and A4H)	Option 229
<input type="checkbox"/> Option 231															
8590-series programming code compatibility	R	R	R	R	R	R	R	R						Option A4H or Option 1AX	
<input type="checkbox"/> Option 290															
HP 8566/68 programming code compatibility				R	R	R	R	R						Option A4H or Option 1AX	
<input type="checkbox"/> Option 266															
ESA-L Series color display upgrade															
Color display upgrade	U	U	U											B723.5	
<input type="checkbox"/> Option 049															

Blank	Not available for model.
X	Available only at time of new instrument purchase.
S	Standard.
R	Available at time of purchase or as a retrofit. Customer installation except where noted.
U	Available as a retrofit only.

- For 3 years, order 36 months of the appropriate calibration plan. For 5 years, specify 60 months.
- For warranty and service of 5 years, please order 60 months of R-51B (quantity = 60). Standard warranty is 12 months.
- Option B72 is required when upgrading to firmware revision A.08.00 and above.
- Functionality of 231 is included in Option 229. A4H must be ordered to take advantage of Link to 89601A VSA software.
- Option B72 is standard on ESA's if the serial prefix number is equal to or greater than US4144 or MY4144. Option B72 is standard on all E7400A Series.

ESA/EMC accessories



Custom backpack for carrying the ESA series analyzer (042, 044)



ESA/EMC accessories (continued)

For field service and portability

- E1779A Battery pack

PC software

- IntuiLink PC connectivity software¹
(standard with Option A4H or 1AX)
- E4444A BenchLink spectrum analyzer PC software
- Option 230 BenchLink web remote control software
- Option 231 ESA to 89601A vector signal analysis software link utility

Programming Code Compatibility

- Option 290 8590-series programming code compatibility

Printer

- HP DeskJet 690C (C4562A) Color printer
- HP DeskJet 932C (C6427B) Color printer
- HP DeskJet 970C (C6429A) Color printer
- HP DeskJet 895C (C6410B) Color printer

Your Agilent ESA spectrum analyzer must be equipped with either Option A4H (GPIB and parallel interface) standard on EMC analyzers or Option 1AX (RS-232 and parallel interface), and an IEEE 1284 compliant printer cable. A supported printer is one that is equipped with a parallel interface and accepts printer control language (PCL) level 3 or 5. PCL3 printers include most HP DeskJet printers. PCL5 printers include most HP LaserJet printers and the HP 1600C DeskJet printer. Visit the Agilent Web site for the latest printer compatibility information at www.agilent.com/find/pg

Preamplifiers

- 87405A Preamplifier (10 MHz to 3 GHz, 24 dB gain)
(fastened to RF input, powered from analyzer)
- 85905A 75 Ohm preamplifier
(45 MHz to 1 GHz 20 dB gain)
(powered from analyzer)
- 11909A 9 kHz to 1 GHz preamplifier

External mixing

- 11970 Series Non-preselected waveguide, harmonic mixers
(26.5 to 110 GHz)
- 11974 Series Preselected waveguide, harmonic mixers
(26.5 to 75 GHz)
- 5061-5458 SMA cables
- R/Q/U/V281A,B mm-Wave-to-coax adaptors
(26.5 to 65 GHz)

Other accessories

- 41800A Active probe
(5 Hz to 500 MHz)
- 85024A High frequency active probe
(300 kHz to 3GHz)
- 5182-4794 RS-232 cable (9-pin F to 9-pin F) for serial
9-pin PC connection to analyzer
- 10833A GPIB cable (1 meter)
- 11940A/11941A Closefield probe

Agilent ESA manuals

Included with an Agilent ESA spectrum analyzer are a Reference Guide, User's Guide, Programmer's Guide (if either Option 1AX or Option A4H is ordered), Calibration Guide, and Specification Guide. You may order additional manual sets by ordering Option 0B1. Localized user guides are also available for the ESA family.

For on-line manuals, visit our Web site at www.agilent.com/find/manuals

¹ For more information about IntuiLink software, visit our Web site at: <http://www.agilent.com/find/intuilink>

Agilent ESA product and application information

Product literature

Modulation Analysis Measurement Personality,
Product Overview

literature number 5988-2116EN

Bluetooth RF Measurement Solution, Product Overview
literature number 5980-2786EN

Cable Fault Location Measurement Personality,
Product Overview

literature number 5980-1915E

Cable TV Service and Installation Analyzer,
Product Overview

literature number 5980-0845E

cdmaOne Measurement Solutions for ESA-E Series
Spectrum Analyzers, Product Overview

literature number 5968-6869E

8590-E Series, Brochure

literature number 5963-6908E

8590-E Series, Technical Specifications

literature number 5963-6909E

8560-EC Series, Brochure

literature number 5968-9571E

8560-EL Series, Technical Specifications

literature number 5966-1496E

8560-EC Series, Technical Specifications

literature number 5968-8156E

11970 Series Harmonic Mixers, Technical Specifications

literature number 5968-1445E

EMC Precompliance Solutions, Brochure,

literature number 5968-2516E

EMC Precompliance Systems, Ordering Information,

literature number 5968-5157E

E7400A-Series EMC Analyzers, Technical Specifications

literature number 5968-3662E

ESA BenchLink Spectrum Analyzer Software,
Product Overview

literature number 5966-0676E

BenchLink Web Remote Control Software

Product Overview

literature number 5988-2610EN

ESA Snap-On Battery Pack, Product Overview
literature number 5966-1851E

ESA-E Series Spectrum Analyzer, Brochure
literature number 5968-3278E

ESA-E Series, Technical Specifications
literature number 5968-3386E

ESA-E Series Self-Guided Demo, Product Note
literature number 5968-3658E

ESA-E Series TV Transmission Quality Measurements,
Product Overview

literature number 5968-6874E

ESA-E Series Measuring Signals Above 26.5 GHz,
Product Overview

literature number 5968-6873E

ESA-L Series, Product Overview

literature number 5965-6309E

Select the Right Spectrum Analyzer for Your Needs,
Selection Guide

literature number 5968-3413E

GSM Measurement Solutions for ESA-E Series
Spectrum Analyzers, Product Overview

literature number 5968-6871E

N2717A Performance Verification and Adjustment
Software, Product Overview

literature number 5968-5478E

Phase Noise Measurement Personality Product, Product
Overview

literature number 5980-1191E

R/Q/U/V281A, B mm-Wave-to-Coax-Adapters, Product
Overview

literature number 5965-1225E

IntwiLink Software, Data Sheet

literature number 5980-3115EN

Application notes

8 Hints for Making Better Spectrum Analyzer Measurements,

literature number 5965-7009E

Cookbook for EMC Precompliance Measurements,

literature number 5968-3661E

Optimizing Spectrum Analyzer Amplitude Accuracy,

literature number 5968-3659E

Optimizing Spectrum Analyzer Dynamic Range,

literature number 5968-4545E

Optimizing Spectrum Analyzer Measurement Speed,

literature number 5968-3411E

Spectrum Analysis Basics-150,

literature number 5952-0292E

See the Agilent ESA and EMC internet pages for the latest information.

Get the latest news, product, and support information, application literature and more. The internet address for the Agilent ESA family is

www.agilent.com/find/esa.

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

Agilent Technologies aims to maximize the value you receive, while minimizing your risk and problems. We strive to ensure that you get the test and measurement capabilities you paid for and obtain the support you need. Our extensive support resources and services can help you choose the right Agilent products for your applications and apply them successfully. Every instrument and system we sell has a global warranty. Support is available for at least five years beyond the production life of the product. Two concepts underlie Agilent's overall support policy: "Our Promise" and "Your Advantage."

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Your Advantage means that Agilent offers a wide range of additional expert test and measurement services, which you can purchase according to your unique technical and business needs. Solve problems efficiently and gain a competitive edge by contracting with us for calibration, extra-cost upgrades, out-of-warranty repairs, and on-site education and training, as well as design, system integration, project management, and other professional engineering services. Experienced Agilent engineers and technicians worldwide can help you maximize your productivity, optimize the return on investment of your Agilent instruments and systems, and obtain dependable measurement accuracy for the life of those products.

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