

# Agilent ESA/EMC Spectrum Analyzer

**Configuration Guide** 



This configuration guide will help you select the right options to optimize the ESA or EMC analyzer for your application. In addition, it includes information for upgrading your existing ESA or EMC analyzer. For additional product and application information, please see the information listed at the end of this guide.

The ESA analyzer is available in three "express option" choices that each have a simplified set of the most frequently ordered options. Express options are favorably priced and provide faster delivery.

The EMC analyzer is available in two models, which include the most frequently ordered options.

For unique requirements, the ESA analyzer may be custom configured from the complete set of available options.



### Express Analyzers - best delivery and price Basic Analyzer – ESA-L Series (Express Option BAS/BTG)

Available models		
E4411B (9 kHz to 1.5 GHz)		The BAS express option is only available on the ESA-L Series models.
E4403B (9 kHz to 3.0 GHz)		For a basic analyzer with tracking generator, order Option BTG
E4408B (9 kHz to 26.5 GHz)		instead of Option BAS.
Included options		Comments
IF sweep, and video output ports	A4J	
GPIB connection	A4H	
IntuiLink PC connectivity software	***	Connects to Microsoft <sup>®</sup> Word and Excel
Available options		Comments
Replace GPIB connection (A4H) with serial port	1AX	Not compatible with Option A4H
Narrow resolution bandwidths	1DR	100 Hz minimum on ESA-L Series
50 ohm tracking generator (9 kHz to 3.0 GHz)	BTG	TG operates to 1.5 GHz on E4411B; equivalent to Option BAS with 1DN
Accessories shown on page 6		
Future upgrades		
Only limited upgrades are available on ESA-L Series		See page 8

### Express Analyzers - best delivery and price Standard Analyzer – ESA-E Series (Express Option STD/STG)

Available models							
E4402B (9 kHz to 3.0 GHz)		The STD express option is only available on the ESA-E Series models					
E4404B (9 kHz to 6.7 GHz)		For a standard analyzer with tracking generator, order Option STG					
E4405B (9 kHz to 13.2 GHz)		instead of Option STD.					
E4407B (9 kHz to 26.5 GHz)							
Included options		Comments					
Fast time domain sweep, IF and video output ports	AYX						
FM demodulation /deviation	BAA						
GPIB Connection	A4H						
IntuiLink PC connectivity software	***	Connects to Microsoft Word and Excel					
Available options		Comments					
Replace GPIB connection (A4H) with serial port	1AX	Not compatible with Option A4H					
High stability frequency reference	1D5						
Time-gated spectrum analysis	1D6						
50 ohm tracking generator (9 kHz to 3.0 GHz)	STG	Equivalent to Option STD with IDN					
Narrow resolution bandwidths	1DR	10 Hz or 1 Hz minimum with Option 1D5					
Preamplifier built-in for enhanced sensitivity 1DS							
Noise figure measurement application	219						
Cable fault location measurement application	225	Requires Option 1DN or STG; recommended Option B7K					
Phase noise measurement application	226						
Cable TV service and installation application	227						
Benchlink Web remote control software	230	Requires Option A4H					
HP 8566/68 programming code compatibility	266	Free download on Web					
8590-Series programming code compatibility	290	Free download on Web					
Accessories shown on page 6							
Future upgrades							
Available expansion slots in the "standard"		Future upgrades on the "standard" analyzer are available,					
analyzer for future upgrades:		given the necessary configuration requirements are met. See page 7					
E4402B – 3 expansion slots							
E4402B with Option 219 – 2 expansion s	lots						
E4404/5/7B – 2 expansion slots							
E4404/5/7B with Option 219 – 1 expans	ion slot						

### Express Analyzers - best delivery and price Communications Test Analyzer – ESA-E Series (Express Option COM)

E4402B (9 kHz to 3.0 GHz)					
E4404B (9 kHz to 6.7 GHz) E4405B (9 kHz to 13.2 GHz) E4407B (9 kHz to 26.5 GHz)		The COM express option is only available on the ESA-E Series mod			
Included options		Comments			
High stability frequency reference	1D5				
Narrow resolution bandwidths	1DR	1 Hz minimum			
ESA to 89601A vector signal analysis software link utility	231				
FM demodulation / deviation	BAA				
Digital demodulation hardware	B7D/B7E				
GPIB connection	A4H				
IntuiLink PC connectivity software	***	Connects to Microsoft Word and Excel			
Available options		Comments			
Replace GPIB connection (A4H) with serial port	1AX	Not compatible with Option A4H			
Time-gated spectrum analysis	1D6	Recommended selection			
Preamplifier built-in for enhanced sensitivity	1DS	Recommended selection			
Noise figure measurement personality	219 <sup>1</sup>				
Phase noise measurement personality	226 <sup>1</sup>				
Cable TV service and installation personality	227 <sup>1</sup>				
Modulation analysis personality	229 <sup>1</sup>				
Benchlink Web remote control software	230	Requires Option A4H			
EDGE upgrade to GSM measurement personality	252 <sup>1</sup>	Requires Option BAH			
cdmaOne measurement personality	BAC <sup>1</sup>				
GSM/GPRS measurement personality	BAH <sup>1</sup>	Requires Option 1D6			
HP 8566/68 programming code compatibility	266 <sup>1</sup>	Free download on Web, no license required			
8590-Series programming code compatibility	290 <sup>1</sup>	Free download on Web, no license required			
Accessories shown on page 6					
Future upgrades					
Available expansion slots in "communications test"		Future upgrades on the "comms test" analyzer are available given			
analyzer for future upgrades:		the necessary configuration requirements are met. See page 7.			
E4402B – 2 expansion slots					
E4402B with Option 219 – 1 expansion cardslots	;				
E4404/5/7B – 1 expansion slot					
E4404/5/7B with Option 219 - no expansion slots					

 If more than two or three measurement personalities are ordered, memory size limitations may limit the number that may be loaded into the ESA at any one time. For detailed information about memory size limits, please see the web site:

http://sa.tm.agilent.com/ESA/memory/

### Custom Configurations ESA-L Series

E4411B (9 kHz to 1.5 GHz) Included options		Custom configuration not available for E4403B or E4408B Comments		
IntuiLink PC connectivity software	***	Connects to Microsoft Word and Excel		
Available options		Comments		
Replace GPIB connection (A4H) with serial port	1AX	Not compatible with Option A4H		
IF sweep, and video output ports	A4J			
Narrow resolution bandwidths	1DR	100 Hz minimum on ESA-L Series		
75 ohm impedance	1DP	Not compatible with Option 1DN		
75 ohm tracking generator (1 MHz to 1.5 GHz)	1DQ	Requires Option 1DP; not compatible with Option 1DN		
Accessories shown on page 6				
Future Upgrades				
Only limited upgrades are available on ESA-L Series		See page 8		

### Custom Configurations ESA-E Series

#### Available models E4402B (30 Hz to 3.0 GHz) Frequency range shown is with Option UKB installed E4404B (30 Hz to 6.7 GHz) The E4402B has six available expansion slots E4405B (30 Hz to 13.2 GHz) The E4404/5/7B have five available expansion slots E4407B (30 Hz to 26.5 GHz) Included options Comments GPIB connection A4H Standard on every instrument unless 1AX is ordered IntuiLink PC connectivity software Connects to Microsoft Word and Excel Available options Comments 1D5 High stability frequency reference Recommended option 1 Hz minimum; recommended option Narrow resolution bandwidths 1DR Low emissions shielding 060 Not compatible with Option B7B Wide offset phase noise improvement and 120 Requires one expansion slot ACPR dynamic range extension Not compatible with Option A4H Replace GPIB connection (A4H) with serial port 1AX Time-gated spectrum analysis 1D6 50 ohm tracking generator (9 kHz to 3.0 GHz) 1DN Preamplifier built-in for enhanced sensitivity 1DS Noise figure measurement personality plus hardware 219 Requires one expansion slot Requires Option 1DN; not compatible with Option BAH; Cable fault location measurement personality 225 recommended accessory Option B7K 226 Phase noise measurement personality Cable RV field service and analog broadcast 227 measurement personality Requires Options B7D, B7E, A4H,1D5; includes capability of Option 231 Modulation analysis personality 229 Benchlink Web remote control software 230 Requires Option A4H Requires Options B7D, B7E, A4H,1D5; Option 229 includes capability of Option 231 ESA to 89601A vector signal analysis software link utility 231 EDGE upgrade to GSM measurement personality 252 Requires Option BAH 266 Available as free download on Web HP 8566/68 programming code compatibility 8590-Series programming code compatibility 290 Available as free download on Web Bluetooth measurement analyzer 304 Includes Options 228, 106, B7D, B7E, 1DS, 1DR; requires three expansion slots FSK demodulator (Option 106) Bluetooth measurement personality (Option 228) AYQ EMI detectors and FM demod Requires one expansion slot Not compatible with Options B7D and 304; requires one expansion slot Fast time domain sweep; IF, sweep, and video output ports AYX AYZ Available on E4407B only External mixing B7B Requires Option BAA; not compatible with Option 060 TV trigger and picture on screen Digital demodulation hardware B7D / B7E Requires Option 1D5; not compatible with Opt AYX; requires two expansion slots Not compatible with Option 304, 106, or AYQ FM demodulation / deviation BAA APC 3.5 mm input connector BAB Available on the E4407B only BAC Requires Options B7D, B7E, 1D5 cdmaOne measurement personality Requires Options B7D, B7E, 1D5, 1D6; includes capability of Option 225 GSM/GPRS measurement personality BAH 26.5 GHz uncalibrated built in preamp H26 Performance not specified; available on E4407B only 70 MHz IF output Recommended for use with 89611A VSA H70 100 Hz (30 Hz usable) frequency range extension **Requires Option 1DR** UKB Accessories shown on page 6

1. If more than two or three measurement personalities are ordered, memory size limitations may limit the number that may be loaded into the ESA at any one time. For detailed information about memory size limits, please see

### Supplemental Option Information Equivalent Options and Bundles

Option	Equivalent Option(s)	Comments
ESA-L Series		
BAS - Basic analyzer	A4J	Order BAS or BTG to get best delivery and price
BTG - Basic analyzer with TG	A4J, 1DN	order DAS of DTG to get best derivery and price
ESA-E Series		
STD - Standard analyzer	AYX, BAA	
STG - Standard analyzer with TG	AYX, BAA, 1DN	Order STD, STG, or COM to get best delivery and price
COM - Communication test analyzer	B7D, B7E, 1D5, 1DR, BAA, 231	
B74 - RF and digital comms hardware bundle	B7D, B7E, 1D6, 1D5, 1DR, 1DS	Option B74 to be discontinued November 1, 2004
	or COM, 1D6, 1DS	
B75 - Performance bundle	1DR, 1DS, 1D5	
304 - Bluetooth premium bundle	228, 106, B7D, B7E, 1DS, 1D5	Option 106 and 228 are no longer available outside of the Option 304 bundle

### Express Analyzers EMC Standard Analyzer - E7400A Series EMC Analyzer

Available models						
E7402A (30 Hz to 3.0 GHz)		The standard EMC analyzer (option STD) contains all the included options listed				
E7405A (30 Hz to 26.5 GHz)		below. To receive a standard analyzer with a tracking generator order options S				
Included options		Comments				
GPIB connection	A4H					
EMI detectors and FM demod	AYQ					
Fast time domain sweep, IF and video output ports	AYX					
100 Hz (30 Hz usable) frequency range extension	UKB					
Low emissions shielding	060					
Narrow resolution bandwidths	1DR	1 Hz resolution				
Preamplifier built-in for enhanced sensitivity	1DS	Operates to 3 GHz				
High stability frequency reference	1D5					
EMC measurement firmware	***	Automated EMC measurements				
IntuiLink PC connectivity software	***	Connects to Microsoft Word and Excel				
Available options		Comments				
50 ohm tracking generator (9 kHz to 3.0 GHz)	STG	Equivalent to Option 1DN				
Replace GPIB connection (A4H) with serial port	1AX	Not compatible with Option A4H or E7415A EMI measurement software				
Time-gated spectrum analysis	1D6					
Accessories shown on page 6		·				
Future upgrades						
Available expansion slots in the standard analyzer for futu	ire innurades.					

Available expansion slots in the standard analyzer for future upgrades:	
E7402A - 3 expansion slots	
E7405A - 2 expansion slots	

### Accessories ESA and EMC Accessories

Options	Description	Comment
	c accessories	1
A5D	12 VDC power cable	DC power connection available on every ESA
AXT	Hard transit case	
AYT	Gray soft carrying/operation case	
AYU	Yellow soft carrying/operation case	
B7K	Cable fault measurement kit (50 ohm)	Requires Option 1DN or STG, and Option 225 or BAH
042	Gray backpack carrying case	
044	Yellow backpack carrying case	
1CP	Rack mount kit with handles	
1D7	50 to 75 ohm minimum loss pad	
E1779A	Rechargeable snap-on battery and charger	Order as separate model number, not option number
UK9	Front panel cover	
Software /	Firmware	
B70	Benchlink spectrum analyzer, PC software	Also orderable as E4444A; requires A4H or 1AX
230	Benchlink Web remote control software	Requires A4H
* * *	IntuiLink software (shipped with every instrument)	Available on Web site for download
UE2	Firmware upgrade	Firmware updates also available on Web site for free download
		http://www.agilent.com/find/esa firmware
Decumenter		
Documentat OB1	Add extra manual set	Available for Web download
UK6	Commercial calibration certificate with test data	
0R0		
OBV	Delete manual set (retains CD-ROM version)	Company the set information and have
-	Service documentation, component level CLIP	Component level information package
OBW	Service documentation, assembly level	Performance verification and adjustment software included
ABO	Taiwan-Chinese user's guide	Available for Web download
AB1	Korea-Korean user's guide	Available for Web download
AB2	China-Chinese user's guide	Available for Web download
ABD	Germany-German user's guide	Available for Web download
ABE	Spain-Spanish user's guide	Available for Web download
ABF	France-French user's guide	Available for Web download
ABJ	Japan-Japanese user's guide	Available for Web download
ABZ	Italy-Italian user's guide	Available for Web download
AKT	Russia-Russian user's guide	Available for Web download
arranty, serv	ice, and calibration	
	1 year return-to-Agilent warranty and service	Standard
	3 year return-to-Agilent warranty and service	Default
	5 year return-to-Agilent warranty and service	
	calibration upfront plan	
	Agilent calibration plus upfront plan	3 or 5 year
	Z540 calibration upfront plan	3 or 5 year
eneral spectr	um analyzer accessories	
11970	Harmonic mixer series (26.5, 40, 50, 60, 75, 110 GHz)	For use in E4407B Option AYZ
11974	Preselected millimeter mixer series (40, 50, 60, 75 GHz)	For use in E4407B Option AYZ
11909A	Low noise amplifier to 1 GHz	
8447A/D	Amplifiers to 400 MHz and 1.3 GHz	
8449B	Preamplifier to 26.5 GHz	

### Upgrades ESA-E Series

E4401BU (9 kHz to 1.5 GHz) E4402BU (30 Hz to 3.0 GHz) E4404BU (30 Hz to 6.7 GHz) E4405BU (30 Hz to 13.2 GHz) E4407BU (30 Hz to 26.5 GHz)			upgradeable	upgradeable w/ test	e w/ Opt OBW	center	
Irdering instructions			gra	grad	upgradeable	service	Return to factory
To upgrade an existing ESA-E Series				_	ade	ser	fac
spectrum analyzer, order the corresponding		For more information see:	Customer	Customer	ıßdr	n to	19
model number followed by a 'U' and the		http://www.agilent.com/find/saupgrades	Isto	Isto	Cust ı	Return	at III
desired option number. (ie. E440xBU-xxx)			ū	С	C	Re	Be
ardware capabilities and performance		·					
Replace GPIB connection (A4H) with serial port	1AX	Not compatible with Option A4H		Х		Х	Γ
GPIB connection	A4H	Not compatible with Option 1AX		Х		Х	
Wide offset phase noise improvement and	120	Requires one free expansion slot		Х		Х	
ACPR dynamic range extension							
Time-gated spectrum analysis	1D6			Х		Х	
50 ohm tracking generator (9 kHz to 3.0 GHz)	1DN	Operates to 1.5 GHz on E4401B		Х		Х	
Narrow resolution BW	1DR			Х		Х	
TV trigger and picture on screen	B7B	Requires BAA; not compatible with Option 060		Х		Х	⊢
Cable fault location accessory kit (50 ohm)	B7K	Requires Option 1DN and Option 225 or BAH	Х				L
FM demodulation/deviation	BAA	Not compatible with Options 304, 106 or AYQ; requires one		Х		Х	
		expansion slot, includes capability of Option A4J					-
Fast time domain sweep; IF, sweep, and video output ports	AYX	Not compatible with Options B7D,		Х		Х	
Leve enteriore elizabile	000	304; requires one expansion slot		v		v	-
Low emissions shielding	060 1DS	Not compatible with B7B		Х	х	X X	-
Preamplifier built-in for enhanced sensitivity 100 Hz (30 Hz usable) frequency range extension	UKB	Operates to 3 GHz Requires Option 1DR			X	X	┢
Digital demodulation hardware	B7D/B7E	Requires Option 1D5; not compatible with Option AYX;			X	X	-
Digital demodulation naturale	DIDIDIC	requires two expansion slots			^	~	
APC 3.5 mm input connector	BAB	Available on the E4407B only			Х	Х	+
Bluetooth FSK demodulator	106	Requires Options B7D, 228		Х	~	X	$\vdash$
External mixing	AYZ	Available on E4407B only				X	
EMI detectors quasi-peak and FM demod	AYQ	Requires one expansion slot		Х		Х	<u> </u>
70 MHz IF out	H70	Requires one expansion slot		Х		Х	X
26.5 GHz uncalibrated built in preamp	H26	Requires one expansion slot					X
Memory extension to 10 MB	B72	Standard on all new instruments starting with SN US4144 or MY4144;	Х			Х	
	195	required for firmware version A.08.00 or higher					-
High stability frequency reference	1D5	E4401B			Х	X	-
		E4402B/04B/05B/07B (SN prefix before 4421)		v		Х	-
IF annound sides and and a set		SN prefixes US4421, MY4421, SG4421 or later		<u>Х</u> Х		X X	⊢
IF sweep, video output ports	A4J	Not compatible with AYX				Χ	
plications and firmware	1						
Noise figure measurement personality	2191	Requires one expansion slot; requires license key		Х		Х	_
Cable fault location measurement personality	225 <sup>1</sup>	Requires Option 1DN; recommended accessory	X				
	0001	Option B7K; firmware available on Web, requires license key	X				-
Phase noise measurement personality	2261	Firmware available on Web, requires license key	X				-
Cable TV service and installation personality	227 <sup>1</sup>	Firmware available on Web, requires license key	X				-
Bluetooth measurement personality	228 229 <sup>1</sup>	Requires Option B7D; requires Option 106 for full functionality	X X				
Modulation analysis personality	229	Requires Options B7D/B7E, A4H,1D5;	^				
		includes capability of Option 231;					
ESA to 89601A vector signal analysis software link utility	231 <sup>1</sup>	firmware available on Web, requires license key Requires Options B7D/B7E, A4H,1D5;	x				⊢
LSA to 6500TA vector signal analysis software link utility	231	Option 229 included capability of Option 231;	^				
		free download from Web					
EDGE upgrade on GSM	252 <sup>1</sup>	Requires Options BAH, B7D/B7E, A4H, 1D5;	X				F
	252	requires Option 1DN for cable fault test					
HP 8566/68 programming code compatibility	266	Free download from Web	x				$\vdash$
8590-Series programming code compatibility	290	Free download from Web	X				$\vdash$
GSM/GPRS measurement personality	BAH <sup>1</sup>	Requires Options B7D/B7E, A4H,1D5; 1D6	X				1
		firmware available on Web, requires license key					
cdmaOne measurement personality	BAC <sup>1</sup>	Requires Options B7D/B7E, A4H,1D5;	Х				
							1

 If more than two or three measurement personalities are ordered, memory size limitations may limit the number that may be loaded into the ESA at any one time. For detailed information about memory size limits, please see the web site: http://sa.tm.agilent.com/ESA/memory/

### Upgrades **ESA-L Series**

#### Available models:

Available models:							—
E4411BU (9 kHz to 1.5 GHz) E4403BU (9 kHz to 3.0 GHz) E4408BU (9 kHz to 26.5 GHz)		Options not listed are not available for upgrade on the ESA-L Series Analyzer	upgradeable	upgradeable w/test	ble w/Opt OBW	ice center	
Ordering instructions				6dn	adea	service	
To upgrade an existing ESA-L Series spectrum analyzer, order the corresponding model number followed by a 'U' and the desired option number. Ex. E44xxBU-xxx		For more information see: http://www.agilent.com/find/saupgrades	Customer	Customer	Cust upgradeable	Return to	
HW capabilities and performance							
Color display upgrade	049	Requires B72 plus firmware version A11.00 or higher	Х		1		Τ
Replace GPIB connection (A4H) with serial port	1AX	Not compatible with A4H		Х		Х	Τ
GPIB connection	A4H	Not compatible with 1AX		Х		Х	T
50 ohm tracking generator ( 9 kHz to 3.0 GHz)	1DN	Incompatible with 1DP; Operates to 1.5 GHz on E4411B; included in Option BTG		Х		Х	T
75 ohm tracking generator (1 MHz to 1.5 GHz)	1DQ	Q E4411B only, requires Option 1DP		Х		Х	t
Narrow resolution bandwidths	1DR	Requires B72 plus firmware version A11.00 or higher; 100 Hz minimum on ESA-L Series		Х		Х	Ī
Memory extension to 10 MB	B72	Included on instrument prefixes ≥ US4144 or MY4144 Required for firmware version A.08.00 or higher	Х			Х	Ī
IF sweep, video output ports	A4J	Standard in all ESA-L analyzers with Option BAS or BTG		Х		Х	t
APC 3.5 mm input connector	BAB	E4408B only			Х	Х	T

Applications and firmware			
HP 8566/68 programming code compatibility	266	Available for Web download	X .
8590-series programming code compatibility	290	Available for Web download	X

### Upgrades E7400A series EMC analyzer

Available models:

'U' and the desired option number. Ex. E740AU-xxx HW capabilities and performance		0	0	U	8	_ <u>~</u>
To upgrade an existing EMC Series spectrum analyzer, order the corresponding model number followed by a	For more information see: http://www.agilent.com/find/saupgrades	Custome	Custome	ust upgi	Return to	Return to
Ordering instructions		er upgi	L .	Irade	o servico	fac
E7405AU (30 Hz to 26.5 GHz)		gradeable	upgradeable	able	n i	1
E7404AU (30 Hz to 13.2 GHz)		abl	abl	/w	cent	
E7403AU (30 Hz to 6.7 GHz)	on the EMC analyzers		B W/	Opt	nter	
E7402AU (30 Hz to 3.0 GHz)	Options not listed are not available for upgrade		/test	COB.		
E7401AU (9 kHz to 1.5 GHz)			st	S.		

1AX	Not compatible with A4H or E7415A	Х		Х	
A4H	Not compatible with 1AX	Х		Х	
1D6		Х		Х	
A4J		Х		Х	
1DN	Operates to 1.5 GHz on E7401A;	Х		Х	
AYX	Requires one expansion slot, standard in	Х		Х	
	all E7400 analyzers with Option STD or STG				
UKB	Standard in all E7400 analyzers with Option STD or STG		Х	Х	
BAB	Available on the E7405A only		Х	Х	
1D5	Included in all E7400 analyzers with Option STD or STG			Х	
	A4H 1D6 A4J 1DN AYX UKB BAB	A4H     Not compatible with 1AX       1D6	A4H     Not compatible with 1AX     X       1D6     X       A4J     X       1DN     Operates to 1.5 GHz on E7401A;     X       AYX     Requires one expansion slot, standard in all E7400 analyzers with Option STD or STG     X       UKB     Standard in all E7400 analyzers with Option STD or STG     X       BAB     Available on the E7405A only     X	A4H     Not compatible with 1AX     X       1D6     X       A4J     X       1DN     Operates to 1.5 GHz on E7401A;     X       AYX     Requires one expansion slot, standard in all E7400 analyzers with Option STD or STG     X       UKB     Standard in all E7400 analyzers with Option STD or STG     X       BAB     Available on the E7405A only     X	A4H     Not compatible with 1AX     X     X     X       1D6     X     X     X     X       A4J     X     X     X     X       1DN     Operates to 1.5 GHz on E7401A;     X     X     X       AYX     Requires one expansion slot, standard in all E7400 analyzers with Option STD or STG     X     X     X       UKB     Standard in all E7400 analyzers with Option STD or STG     X     X     X       BAB     Available on the E7405A only     X     X     X

## **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 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 Performance Verification and Adjustment Software, (See Option OBW) Phase Noise Measurement Personality Product, Product Overview literature number 5988-4348E R/Q/U/V281A, B mm-Wave-to-Coax-Adapters, Product Overview literature number 5965-1225E IntuiLink Software, Data Sheet literature number 5980-3115EN

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### **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 5952-0292

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. For the latest EMC products and information visit www.agilent.com/find/emc

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

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