

## HP 8590 C/E/L/Q and EM Series Spectrum Analyzers and Accessories

# Configuration Guide



**HP 8591C Cable TV Analyzer** (1 MHz to 1.8 GHz)

**HP 8591E RF Spectrum Analyzer** (9 kHz to 1.8 GHz)

HP 8593E Microwave Spectrum Analyzer (9 kHz to 22 GHz)

**HP 8594E RF Spectrum Analyzer** (9 kHz to 2.9 GHz)

HP 8595E RF Spectrum Analyzer (9 kHz to 6.5 GHz)

**HP 8596E Microwave Spectrum Analyzer** (9 kHz to 12.8 GHz)

**HP 8590L Spectrum Analyzer** (9 kHz to 1.8 GHz)

**HP 8592L Microwave Spectrum Analyzer** (9 kHz to 22 GHz)

HP 8594L RF Spectrum Analyzer (9 kHz to 2.9 GHz)

HP 8594Q QAM Analyzer (9 kHz to 2.9 GHz)

**HP 8591EM EMC Analyzer** (9 kHz to 1.8 GHz)

**HP 8593EM EMC Analyzer** (9 kHz to 22 GHz)

HP 8594EM EMC Analyzer (9 kHz to 2.9 GHz)

**HP 8595EM EMC Analyzer** (9 kHz to 6.5 GHz)

**HP 8596EM EMC Analyzer** (9 kHz to 12.8 GHz)

		Opt Card Slots Req'd	НР	HP	НР	НР	НР	НР	НР	НР	HP	HP	HP 8590EM
Option	Description	(4 max)	8591C	8591E	8593E	8594E	8595E	8596E	8590L	8592L	8594L	8594Q	Series
<b>001</b>	75 Ohm input impedance	0	Std	<b>√</b>					✓				
□ 003	Memory card reader	0	Std	Std	Std	Std	Std	Std	✓	✓	✓	Std	Std
□ 004	Precision frequency reference	0	Std	✓	✓	✓	✓	✓				Std	✓
□ 009	Local oscillator and sweep + tune outputs (rear panel)	1 <sup>28</sup>			✓	✓	✓	✓					<b>√</b> 14
□ 010	Built-in tracking generator, 50 Ohm (100 kHz-1.8 GHz)	0		✓					✓				<b>√</b>
□ 010	Built-in tracking generator, 50 Ohm (9 kHz–2.9 GHz)	1 <sup>28</sup>			✓	✓	✓	✓					<b>√</b>
□ 011	Built-in tracking generator, 75 Ohm (100 kHz–1.8 GHz)	0	✓	✓					✓				
□ 012	DECT source	2			✓	✓	✓	✓					
□ 015	Protective soft tan carrying/operating case	0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
□ 016	Protective soft yellow operating/carrying case	0	Std	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>□</b> 026	Frequency extension to 26.5 GHz (APC 3.5 mm connector)	0			✓					✓			<b>√</b> <sup>2</sup>
<b>□</b> 027	Frequency extension to 26.5 GHz (type-N connector)	0			✓					✓			<b>√</b> <sup>2</sup>
□ 030	Adds HP 85921B Cable TV Data Management S/W for FCC	; 31 0	✓										
□ 040	Front panel protective cover w/CRT viewing hood	0		✓	✓	✓	✓	✓	✓	✓	✓	✓	
□ 041	HP-IB interface and parallel printer interface <sup>4, 22</sup>	0	✓	✓	✓	✓	✓	✓	✓	✓	✓	Std	Std
<b>1</b> 042	Protective soft carrying case/backpack <sup>21</sup>	0		✓	✓	✓	✓	✓	✓	✓	✓		<b>√</b>
<b>□</b> 043	RS-232 interface and parallel printer interface <sup>4, 22</sup>	0	Std	✓	✓	✓	✓	✓	✓	✓	✓	✓	<b>√</b>
□ 050	Improved amplitude accuracy for NADC-TDMA/PCS bands	0		✓	✓	✓	✓	✓					
<b>051</b>	Improved amplitude accuracy for PDC bands	0		✓	✓	✓	✓	✓					
<b>□</b> 052	Improved amplitude accuracy for PHS band	0			✓	✓	✓	✓					
<b>□</b> 053	Improved amplitude accuracy for CDMA/PCS bands	0		<b>√</b>	✓	✓	✓	✓					
<b>□</b> 078	Adds HP 85878A report generation software												<b>√</b>
□ 0B0	Delete manual set	0	<b>√</b>	<b>√</b>	✓	✓	✓	✓	✓	✓	✓	✓	
□ 101	Fast time-domain sweeps and Analog + display	1	Std	<b>√</b>	✓	✓	✓	✓					<b>√</b>
<b>102</b>	AM/FM demod. with speaker and TV sync. trigger 5, 24	1	Std	✓	✓	✓	✓	✓					✓
<b>103</b>	Quasi-peak detector and AM/FM demod with speaker 24	1		✓	✓	✓	✓	✓					Note 3
□ 105	Time-gated spectrum analysis	0		<b>√</b>	✓	✓	✓	✓					
□ 107	TV receiver video tester <sup>32</sup>	1	✓	✓	✓	✓	✓	✓					
□ 110	CT2 demodulator <sup>6, 24</sup>	1		✓	✓	✓	✓	✓					
□ 111	Group delay w/compatible tracking generator34	2			<b>√</b>	✓	✓	✓					
□ 112	DECT demodulator <sup>24</sup>	1			✓	<b>√</b>	✓	✓					
□ 119	Noise figure <sup>7</sup>	1	<b>√</b>	<b>√</b>	✓	<b>√</b>	✓	✓					
□ 130	Narrow resolution bandwidths (30 Hz,100 Hz,300 Hz and 200 Hz EMI)	1	/	✓	<b>√</b>	<b>√</b>	<b>√</b>	✓					Std
□ 140	Narrow resolution bandwidths/precision frequency reference (Opt 004 and 130)	1		<b>√</b>	<b>√</b>	✓	✓	<b>√</b>					
□ 151	DSP, fast ADC, and digital demodulator <sup>29</sup>	2		<b>√</b> 25	✓	✓	✓	✓					
<b>160</b>	PDC, PHS, NADC, and CDMA firmware for Option 15135	0		<b>√</b> 25	✓	✓	✓	✓					

Option	Description	Opt Card Slots Req'd (4 max)	HP 8591C	HP 8591E	HP 8593E	HP 8594E	HP 8595E	HP 8596E	HP 8590L	HP 8592L	HP 8594L	HP 8594Q	HP 8590EM Series
□ 163	GSM900/DCS1800 firmware for Option 15135	0	03310	0331L			/ /		0330L	0332L	0334L	00340	
☐ 180	TV picture on screen (NTSC, PAL, and SECAM) <sup>32</sup>	1											
☐ 100 ☐ 190	DVB-C RF and modulation quality measurements	3		<u> </u>	•								
☐ 195	R-S and true BER and PID statistics data measurements	1											
□ 301	TV sync. trigger capability, fast time domain sweeps, AM/FM	'										•	
_ 001	demodulator, and Analog + display (Option 101 and 102) <sup>24</sup>	2	Std	✓	✓	✓	✓	✓					✓
<b>□</b> 701	Delete TV sync. trigger capability, fast time domain												
	sweeps, AM/FM demodulator and Analog + display	•	,										
702	(Options 101 and 102)	-2	<b>√</b>										
□ 703	Delete quasi-peak detector and AM/FM demodulator	<u>-1</u>											
□ 704	Delete precision frequency reference	0	✓										
711	50/75 Ohm matching pad with 100V DC block	0		<b>√</b>	<b>√</b>		<u> </u>	<b>√</b>	<b>√</b>	<u> </u>	<b>√</b>		
908	Rack mount kit without handles		<u>/</u>	<b>√</b>	· /	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	
909	Rack mount kit with handles		✓	✓	✓	<b>√</b>	✓	<b>√</b>	✓	✓	✓	<b>√</b>	
□ 910	Additional user's guide, calibration guide, and quick reference guide		✓	✓	✓	✓	1	1	✓	✓	✓	✓	✓
□ 915	Component level information and service guide		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
□ AB_	Quick reference guide in local languages8		<b>√</b> 18	✓	✓	✓	✓	✓					
□ E04	DRTS compatibility	2					Note 1						
☐ H80	PAL/SECAM TV monitor <sup>23</sup>	0							✓	✓			
☐ H81	NTSC TV monitor	0							✓	✓			
□ 8ZE	Refurbished spectrum analyzer (as available)					Contact an I	HP represen	tative for ava	ilability				
□ 0Q8	Factory service training		✓	✓	✓	✓	✓	✓	✓	✓			
☐ UK6	Commercial calibration certificate with test data		✓	✓	✓	✓	✓	✓	✓	✓	✓	<b>√</b>	
□ W30	Two additional years return-to-HP service9		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
□ W32	Two additional years return-to-HP calibration9		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
□ W34	3 year standards compliant calibration service			✓	✓	✓	✓	✓	✓	✓	✓		✓
□ W50	Four additional years return-to-HP service9		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
☐ W52	Four additional years return-to-HP calibration <sup>9</sup>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
□ W54	5 year standards compliant calibration service			✓	✓	✓	✓	✓	✓	✓	✓		<b>√</b>
□ B70	BenchLink spectrum analyzer	0	<b>√</b>	✓	✓	✓	✓	✓	✓	✓	✓	<b>√</b>	
☐ BD0	Code division multiple access	2			✓	✓	✓	✓					
☐ BD1	Global system for mobile communication	2			✓	✓	✓	✓					
☐ BD2	North american digital cellular system	2			✓	✓	✓	✓					
☐ BD3	Pacific digital cellular system	2			✓	✓	✓	✓					
☐ BD4	Personal handyphone system	2			<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>					

# HP 8590 C/E/L/Q and EM Series Retrofit Kits<sup>10</sup>

(For Option installation after analyzer purchase)

✓ = compatible

•		Opt Card Slots Req'd		HP	HP	HP	НР	НР	НР	НР	НР	HP	HP 8590EM
Option ☐ R01	Description Fast time-domain sweeps and analog + display	(4 max)	8591C	8591E	8593E	8594E	8595E	8596E	8590L	8592L	8594L	8594Q	Series
□ R02	AM/FM demodulator with speaker and TV sync	- 1		<b>-</b>	<b>-</b>		· ·	· · ·					
☐ N02	trigger circuitry <sup>5</sup>	1	/	✓	1	✓	1	✓					
□ R03	Memory card reader	0	Std	Std	Std	Std	Std	Std	<b>√</b>	<b>√</b>	<b>√</b>	Std	Std
□ R04	Precision frequency reference	0	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓				Std	
□ R05	CT2 demodulator <sup>6, 24</sup>	1		<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>					
□ R06	DECT demodulator <sup>24</sup>	1			✓	<b>√</b>	✓	✓					
□ R07/F	R17 TV receiver/ video tester1	1	<b>√</b>	<b>√</b>	✓	<b>√</b>	✓	✓					
□ R10	Built-in tracking generator, 50 Ohm (100 kHz to 1.8 GHz)	0		<b>√</b>					✓				
☐ K10	Built-in tracking generator, 50 Ohm (9 kHz to 2.9 GHz) <sup>17</sup>	1			✓	✓	✓	✓					
☐ R11	Built-in tracking generator, 75 Ohm (100 kHz to 1.8 GHz)	0	✓	✓					✓				
☐ R15	Time-gated spectrum analysis	0		✓	✓	✓	✓	✓					
☐ R16	Protective soft yellow operating/carrying case	0	✓	✓	✓	✓	✓	✓	✓	✓	✓		
☐ R19	Noise figure <sup>7</sup>	1	✓	✓	✓	✓	✓	✓					
☐ R21	HP-IB interface <sup>4, 22, 27</sup>	0	✓	✓	✓	✓	✓	✓	✓	✓			
☐ R23	RS-232 interface <sup>4, 22, 27</sup>	0	✓	✓	✓	✓	✓	✓	✓	✓			
☐ R24	Parallel printer interface <sup>22, 27</sup>	0	✓	✓	✓	✓	✓	✓	✓	✓			
☐ R25	Protective soft tan operating/carrying case	0	✓	✓	✓	✓	✓	✓	✓	✓	✓		
☐ R30	Narrow resolution bandwidths	1	✓	✓	✓	✓	✓	✓				Std	
☐ R41	HP-IB interface and parallel printer interface <sup>4, 22, 26</sup>	0	✓	✓	✓	✓	✓	✓	✓	✓	✓		
☐ R43	RS-232 interface and parallel printer interface <sup>4, 22, 26</sup>	0	Std	✓	✓	✓	✓	✓	✓	✓	✓		
☐ R50	Improved amplitude accuracy for NADC-TDMA/PCS bands	0		✓	✓	✓	✓	✓					
☐ R51	Improved amplitude accuracy for PDC bands	0		✓	✓	✓	✓	✓					
□ R52	Improved amplitude accuracy for PHS band	0			✓	✓	✓	✓					
☐ R53	Improved amplitude accuracy for CDMA/PCS cellular bands			✓	✓	✓	✓	✓					
□ R60	PDC, PHS, NADC, and CDMA firmware for Option 15135	0		<b>√</b> 25	✓	✓	✓	✓					
☐ R63	GSM900/DCS1800 firmware for Option 15135	0			✓	✓	✓	✓					
☐ R70	PDC/PHS/NADC/CDMA FW+Opt 151 retro. kit <sup>35</sup>	2		<b>√</b> 25	✓	✓	✓	✓					
□ R73	DSP, fast ADC, and digital demodulator with GSM900/DCS1800 firmware <sup>35</sup>	2			✓	<b>√</b>	✓	<b>√</b>					
□ R80	TV picture on screen (NTSC, PAL, and SECAM)	1	✓	✓	✓	✓	✓	✓					
□ R95	R-S and true BER and PID statistics data measurements	1									✓		
	1768A Group delay retrofit kit	1			✓	✓	✓	✓					
☐ HP 11	<b>1946A</b> Quasi-peak detector and AM/FM demod retrofit kit	1		✓	✓	✓	✓	✓					

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# HP 8590 C/E/L/Q and EM Series Measurement Personalities $^{13}$

√ = compatible

		HP	HP	НР	HP	НР	HP	НР	HP	НР	НР	HP 8590EM
Option	Description 1/DANN44	8591C	8591E	8593E	8594E	8595E	8596E	8590L	8592L	8594L	8594Q	Series
☐ HP 85700A	32 Kbyte blank memory card (RAM) <sup>11</sup>	<b>√</b>	<b>√</b>	✓	✓	✓	✓	✓	✓	<b>√</b>	<b>✓</b>	✓
☐ HP 85702A	128 Kbyte blank memory card (RAM) <sup>11</sup>	<b>√</b>	<b>√</b>	✓	<b>√</b>	✓	<b>√</b>	✓	✓	<b>√</b>	<b>√</b>	<b>√</b>
☐ HP 85704A	256 Kbyte blank memory card (RAM) <sup>11</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
☐ HP 85705A	512 Kbyte blank memory card (RAM) <sup>11</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
☐ HP 11770A	Link measurements personality <sup>30</sup>			✓	✓	✓	✓					
☐ HP 85712D	EMC measurements personality <sup>12</sup>		✓	✓	✓	✓	✓					
☐ HP 85713A	Digital radio measurements personality <sup>11</sup>			✓	✓	✓	✓		✓			
☐ HP 85714A	Scalar measurements personality <sup>11</sup>	<b>√</b>	✓	✓	✓	✓	✓	✓				
☐ HP 85715B	GSM900 measurements personality with modulation accuracy <sup>19</sup>		/	✓	✓	✓	✓					
□ HP 85717A	CT2-CAI measurements personality		<b>√</b>	✓	✓	✓	✓					
☐ HP 85718B	NADC/PCS -TDMA measurements personality <sup>19</sup>		✓	✓	✓	✓	✓					
☐ HP 85719A	Noise figure measurements personality	<b>√</b>	<b>√</b>	✓	<b>√</b>	✓	<b>√</b>					
☐ HP 85720BC	PDC measurements personality upgrade kit: B to C		<b>√</b>	✓	<b>√</b>	✓	<b>√</b>					
☐ HP 85720C	PDC measurements personality with modulation accuracy <sup>19</sup>		✓	✓	✓	✓	✓					
☐ HP 85721A	Cable TV measurements personality with video tests <sup>11,18,15</sup>	Std	✓	✓	✓	✓	✓	✓	✓	✓		
☐ HP 85722B	DCS1800 measurements personality with modulation accuracy	/		✓	<b>√</b>	✓	<b>√</b>					
☐ HP 85723A	DECT measurements personality			✓	<b>√</b>	✓	<b>√</b>					
☐ HP 85724A	Broadcast measurements personality	<b>√</b>	<b>√</b>	✓	<b>√</b>	✓	<b>√</b>					
☐ HP 85725C	CDMA measurements personality		<b>√</b>	✓	<b>√</b>	✓	<b>√</b>					
☐ HP 85725CU	CDMA measurements personality upgrade kit: B to C		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>					
☐ HP 85726AB	PHS measurements personality upgrade kit: A to B			<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>					
☐ HP 85726B	PHS measurements personality with modulation accuracy			<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>					
☐ HP 85727A	GSM Multi-band measurement personality			<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>					
☐ HP 85727AU	GSM Multi-band upgrade			✓	✓	✓	✓					

## **PC Software**

☐ HP 85921B	Cable TV data management S/W for FCC31	✓	<b>√</b> 33			_							
☐ HP E4444A	Benchlink spectrum analyzer	/	/	<b>√</b>	<b>√</b>	/	/	/	/	<b>√</b>	<b>√</b>	<b>√</b>	

## HP 8590 C/E/L/Q and EM Series Accessories

#### For Scalar Measurements □ HP 85630A Scalar 50 Ohm transmission/reflection test set HP 86205A 50 Ohm RF bridge (type-N(f), 300 kHz to 6 GHz, 1.5 dB +0.1 dB/GHz insertion loss) HP 86207A 75 Ohm RF bridge (type-N(f), 300 kHz to 3 GHz, 1.5 dB +0.1 dB/GHz insertion loss) For EMC Measurements □ HP 11945A Close field probe set (9 kHz to 1 GHz) (with Option E51)<sup>16</sup> □ HP 11947A Transient limiter (BNC(f) to type-N(m), 9 kHz to 200 MHz, 10 dB insertion loss) **Printers and Accessories** Most Hewlett-Packard DeskJet and LaserJet (PCL 3 compatible) printers are compatible with HP 8590 series spectrum analyzers. Printer compatibility chart is on the HP internet web site at http://www/hp/com/go/pcg/ HP 10833A HP-IB cable (1 meter) □ HP 24542U RS-232 cable 3 meter (9 pin F to 9 pin F) Option 043 only (for RS-232 9 pin PC connection to analyzer) **HP 24542G** RS-232 cable 3 meter (25 pin M to 9 pin F) Option 043 only (for RS-232 25 pin PC or printer connection to analyzer) **HP 24542M** RS-232 cable 3 meter (25 pin M to 9 pin F) Option 043 only (for RS-232 25 pin modem connection to analyzer) **HP C2932A** RS-232 cable 3 meter (9 pin M to 9 pin F) Option 043 only (for serial 9 pin LaserJet 4P/4Plus connection to analyzer) **HP 13242G** RS-232 cable (5 meter) (for Option 023 only) **HP C2950A** Parallel printer cable (2 meter) HP ITEL-45CHVUB HP-IB/Parallel converter (North America, Japan, Korea, and Taiwan) HP ITEL-45CHVEB HP-IB/Parallel converter (Continental Europe, U.K., Australia, and South Africa) (requires HP F1011A AC adapter) **Amplifiers and Preamplifiers** □ HP 8447D Preamplifier (100 kHz to 1.3 GHz, >25 dB gain) □ HP 8449B Preamplifier (1 GHz to 26.5 GHz, 30 dB gain) □ HP 10855A Broadband preamplifier (2 MHz to 1300 MHz, 22 dB gain) HP 85905A 75 Ohm preamplifier (45 MHz to 1GHz, 20 dB gain) □ HP 87405A Amplifier (10 MHz to 3 GHz, 22 dB gain) □ HP 87415A Amplifier (2 GHz to 8 GHz, 25 dB gain) Other Accessories HP D4950A Keyboard **HP 346B** Noise source (BNC(f) to APC 3.5(m), 10 MHz to 18 GHz) HP 11693A Limiter (type-N(f) to type-N(m), 0.1 GHz to 12.4 GHz, <2.0 dB insertion loss) HP 11694A 75/50 Ohm matching transformer (BNC(f) to BNC(m), 3 MHz-500 MHz, <.75 dB insertion loss) HP 0955-1020 50 to 75 Ohm adapter. Same as Opt. 711 HP 11742A High frequency blocking capacitor (3.5mm(f to m)), 10 MHz to 26.5 GHz, .35 dB IL <12.4 GHz, .7 dB IL <26.5 GHz) HP 11852B Order with Option C04, 75/50 Ohm min. loss pad (type-N(f) to type-N(m), DC to 2 GHz, 5.7 dB insertion loss) HP 11867A RF Limiter (type-N(f) to type-N(m), DC to 1.8 GHz, <.75 dB insertion loss) HP 11930B Power limiter (5 MHz to 6 GHz) HP 41800A Active probe (5 Hz to 500 MHz) **HP 85024A** High frequency probe (300 kHz to 3 GHz) **HP 85901A** Portable AC power source **HP 85902A** Burst carrier trigger 1420-0383 Memory card battery (CR 2016) 1494-0060 Rack slide for rack mount 08590-60369 RS-232/parallel connector assembly to convert Opt 041 (HP-IB) to Opt 043 (RS-232) 08590-60368 HP-IB/parallel connector assembly to convert Opt 043 (RS-232) to Opt 041 (HP-IB)

## HP 8590 C/E/L/Q-Series Accessories (Cont'd)

	9211-5604 5062-4841 5062-4840	Transit case Rack mount without handles $^{20}$ (centers instrument in rack) Rack mount with handles $^{20}$ (centers instrument in rack)
	5062-8240	Rack mount with handles <sup>20</sup> (mounts instrument left of center)
	5062-8241	Rack mount without handles (mounts instrument left of center)
	5180-9055	CRT viewing hood (sun shield)
	5063-0654	Frequency accuracy retrofit kit for HP 8590B and HP 8590D
H	P 8590 C/E/I	/Q-Series Manuals
	08590-90234	HP 8590 E/L Series user's guide
	08590-90243	HP 8590 E/L Series quick reference guide
	08590-90235	HP 8590 Series programmer's guide
	5960-6588	HP 8590 E/L Series quick reference guide in French
	5960-6590	HP 8590 E/L Series quick reference guide in German
	5960-6592	HP 8590 E/L Series quick reference guide in Italian
	5960-6594	HP 8590 E/L Series quick reference guide in Spanish
	5960-6596	HP 8590 E/L Series quick reference guide in Japanese
	08590-90260	HP 8590 E/L Series user's guide for Taiwan in Chinese
	08590-90261	HP 8590 E/L Series user's guide for China in Chinese
	5962-5001	HP 8590 E/L Series user's guide in French
	5962-5002	HP 8590 E/L Series user's guide in German
	08590-90286	HP 8590 E/L Series user's guide in Italian
	5962-5004	HP 8590 E/L Series user's guide in Spanish
	08590-90269	HP 8590L calibration guide
	08594-90183	HP 859x C/E Series calibration guide
	08592-90082	HP 8592L calibration guide
	5963-2950	HP 8590 C/E/L/Q Series assembly level repair guide
	5963-2951	HP 8590 C/E/L/Q Series component level repair guide
	08591-90129	HP 8591C Cable TV analyzer user's guide, spectrum analyzer reference
	08591-90176	HP 8591C Cable TV analyzer user's guide, cable TV measurements
	08591-90130	HP 8591C getting started and quick reference guide

## HP 8590 C/E/L/Q and EM Series Notes

- 1. For more information please contact your local HP sales representative.
- 2. HP 8593 EM only.
- 3. Quasi-peak detection and AM/FM demodulator is standard on HP 8590 EM-series and has additional capacity compared to option 103.
- 4. Programming manual included.
- 5. Options 101 and 102 required for TV sync trigger capability. See Option 301.
- 6. HP 85717A measurement personality required.
- 7. HP 85719A measurement personality required.
- 8. ABF Quick reference and user's guides in French
  - ABD Quick reference and user's guides in German
  - ABZ Quick reference and user's guides in Italian
  - ABE Quick reference and user's guides in Spanish
  - ABJ Quick reference guide in Japanese
  - ABO Quick reference guide for Taiwan in Chinese
  - AB2 Quick reference guide for China in Chinese
- 9. An incremental cost will be added to the base price of Options W30/W32/W34/W50/W52/W54 for an 859xC/E/L/Q containing Options 010, 011, or 130.
- 10. Parts only kits. No installation included. May require new analyzer firmware.
- 11. Option 003 (card reader) on the HP 8590L, HP 8592L and HP 8594L is required.
- 12. For more information on EMC products and configurations see lit. #5964-6089E.
- 13. Refer to measurement personality product literature for required HP 8590 series option configuration.
- 14. Except HP 8591 EM.
- 15. Video tests not supported on HP 8590L, HP 8592L or HP 8594L.



## HP 8590 C/E/L/Q and EM Series Notes (Cont'd)

- 16. Option E51 comes with preamplifier, carrying case, cables and connectors.
- 17. Tracking generator retrofit requires factory installation of Option K10.
- 18. Cable TV measurements are formatted for local country's cable TV standards.
- 19. Modulation accuracy measurements not supported on HP 8591E.
- 20. Rack height is 8.75 inches.
- 21. Not for analyzer operation while in carrying case.
- 22. Options 021, 023 and 024 or 041 and 043 cannot be combined.
- 23. Not compatible with Option 107.
- 24. Not compatible with other demodulator options (102, 103, 110, 112 or 301).
- 25. Compatibility with HP 8591E limited to CDMA applications only.
- 26. Compatible with serial prefixes 3523A or 3525U and higher.
- 27. Compatible with serial prefixes lower than 3523A or 3525U.
- 28. If Options 009 and 010 are combined on the HP 8593E/94E/95E/96E or 8590 EM series; only one option card slot is required.
- 29. Not compatible with Options 101 and 301.
- 30. Requires Option 111. Not compatible with 8591E.
- 31. NTSC Cable TV analyzers only.
- 32. Option 107 is not compatible with Option 180.
- 33. HP 85721 Cable TV measurement personality required.
- 34. HP 11770A Link measurements personality required. Do not order Option 010 with Option 111.
- 35. Option 160 and 163 are not compatible.

For more information about Hewlett-Packard test and measurement products, applications, services, and for a current sales office listing, visit our web site, http://www.hp.com/go/tmdir. You can also contact one of the following centers and ask for a test and measurement sales representative.

### **United States:**

Hewlett-Packard Company Test and Measurement Call Center P.O. Box 4026 Englewood, CO 80155-4026 1 800 452 4844

#### Canada:

Hewlett-Packard Canada Ltd. 5150 Spectrum Way Mississauga, Ontario L4W 5G1 (905) 206 4725

#### **Europe:**

Hewlett-Packard European Marketing Centre P.O. Box 999 1180 AZ Amstelveen The Netherlands (31 20) 547 9900

#### Japan:

Hewlett-Packard Japan Ltd. Measurement Assistance Center 9-1, Takakura-Cho, Hachioji-Shi, Tokyo 192, Japan Tel: (81) 426-56-7832 Fax: (81) 426-56-7840

### Latin America:

Hewlett-Packard Latin American Region Headquarters 5200 Blue Lagoon Drive, 9th Floor Miami, Florida 33126, U.S.A. (305) 267 4245/4220

### Australia/New Zealand:

Hewlett-Packard Australia Ltd. 31-41 Joseph Street Blackburn, Victoria 3130, Australia 1 800 629 485

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