Network Analyzers

Microwave Network Analyzer Accessories | 285

HP 8510
HP 8719/8720
Series

NEW

For HP 8510XF Systems (1.0 mm test port connectors)

Cables/Adapters	Connector Type
HP 11500I 1.0 mm test port cable	1.0 mm (f-f) (88 mm long)
HP 11500J 1.0 mm test port cable	1.0 mm (m-f) (160 mm long)
HP 11500K 1.0 mm test port cable	1.0 mm (m-f) (200 mm long)
HP 11500L 1.0 mm test port cable	1.0 mm (m-f) (240 mm long)
HP 11920A/B/C[1] adapters	1.0 mm series adapters
HP 11921A/B/C/D[1] adapters	1.0 mm to 1.85 mm series adapters
HP 11922A/B/C/D[1] adapters	1.0 mm to 2.4 mm series adapters
HP 11923A adapters	1.0 mm (f) to circuit card launch
HP V281C/D[2] adapters	1.0 mm to V-band waveband guide
HP W281C/D[2] adapters	1.0 mm to W-band waveband guide

[1]Suffix 'A' denotes male-to-male, 'B' denotes female-to-female, 'C' denotes male-to-female and 'D' denotes female-to-male.
[2]Suffix 'C' denotes 1.0 mm female and 'D' denotes 1.0 mm male.

Microwave Network Analyzer Accessories

Microwave accessories for the HP 8720D and the HP 8510C series network analyzers include calibration kits, verification kits, cables, and adapters for 7-mm, 3.5-mm, Type-N, 2.4-mm, 1.85-mm, and 1-mm coaxial, WR-90, WR-62, WR-42, and WR-28 waveguide. Millimeter-wave accessories for the HP 8510C series network analyzers include WR-22, WR-29, WR-15, and WR-10 waveguide connector interfaces. The standards used in the 3.5-mm, Type-N, and 2.4-mm kits use precision, slotless connectors (PSC-3.5, PSC-N, and PSC-2.4).

Calibration Kits

Error-correction procedures require that the systematic errors in the measurement system be characterized by measuring known devices (standards) on the system over the frequency range of interest. HP offers two types of calibration kits: mechanical and electronic.

Electronic Calibration (ECal)

ECal modules have two-ports. Modules are available with 3.5mm, 7mm, Type-N, Type-F and 7-16 connectors. The Type-N, Type-F, 7-16 and 3.5mm ECal modules have one male and one female connector. Options exist for modules with two male or two female connectors. To interface the ECal module with your computer and your network analyzer, please order an HP 85097A.

HP 85097A PC Interface Module with Control Software

The HP 85097A consists of a PC interface module, control software, and power supply. The PC interface module is the interface between the parallel port on your computer, the ECal module, and the external power supply. The control software has two interfaces: the graphical user interface (GUI) and the software programming interface (SPI). The GUI allows users to perform an electronic calibration in manual mode via the softkeys on your network analyzer. The SPI allows the calibration to be performed automatically by a user program. The software runs on a PC under Windows 95 or Windows NT 4.0 operating system or higher. The HP 85097A requires a PC with a GPIB (IEEE-488) interface card connected to the network analyzer. The HP 85097A interfaces with the HP 8510B (firmware revision 6.0 or higher), 8510C, 8719C/D, 8720C/D, 8722C/D. and 8753C/D/E.

Mechanical Calibration Kits

All network analyzer mechanical calibration kits contain precision standard devices to characterize the systematic errors of the HP 8720 series or 8510C network analyzer system.

Each mechanical calibration kit also contains adapters to change the sex of the test port and a torque wrench for proper connection. Each kit contains standards definitions on disk for the HP 8510C. (These definitions are already included in the HP 8720 series.)

Verification Kits

Measuring known devices, other than the calibration standards, is a straightforward way of verifying that the network analyzer system is operating properly. HP offers verification kits that include precision airlines, mismatch airlines, and precision fixed attenuators. Traceable measurement data is shipped with each kit on disk.

Verification kits may be recertified by Hewlett-Packard. This recertification includes a new measurement of all standards, as well as new data and uncertainties. Certification in compliance with MIL-STD-45662A is also available.

Verification Kit Summary

Verification kit	Connector type	Frequency range (GHz)	Price
85051B	7 mm	0.045 to 18	$6,300
85053B	3.5 mm	0.045 to 26.5	$6,400
85055A	Type-N	0.045 to 18	$6,300
85057B	2.4 mm	0.045 to 50	$6,900
R11645A	WR-28	26.5 to 40	$5,795
Q11645A	WR-22	33 to 50	$5,795
U11645A	WR-19	40 to 60	$5,795
V11645A	WR-15	50 to 75	$5,795
W11645A	WR-10	75 to 110	$5,965

Mechanical Calibration Kits

Calibration kit	Connector type	Frequency range (GHz)	Price
85050B	7 mm	0.045 to 18	$7,650
85050C	7 mm	0.045 to 18	$7,900
85050D	7 mm	0.045 to 18	$2,680
85052B	3.5 mm	0.045 to 26.5	$9,825
85052C	3.5 mm	0.045 to 26.5	$11,500
85052D	3.5 mm	0.045 to 26.5	$5,130
85054B	Type-N	0.045 to 18	$13,000
85054D	Type-N	0.045 to 18	$6,375
85056A	2.4 mm	0.045 to 50	$10,915
85056D	2.4 mm	0.045 to 50	$6,255
85056K	2.92 mm	0.045 to 40	$8,260
85059A	1.0 mm	0.045 to 110	$20,300
X11644A	WR-90	8.2 to 12.4	$4,900
P11644A	WR-62	12.4 to 18.0	$4,900
K11644A	WR-42	18.0 to 26.5	$5,045
R11644A	WR-28	26.5 to 40	$4,455
Q11644A	WR-22	33 to 50	$4,845
U11644A	WR-19	40 to 60	$5,275
V11644A	WR-15	50 to 75	$5,235
W11644A	WR-10	75 to 110	$5,355

HP 85097A PC Interface Module | | | $1,400

ECal Modules

ECal Module	Connector Type	Frequency Range[1]	Price
85091A	7 mm	30 kHz to 6 GHz	$3,000
85060B Option 001	7 mm	1 GHz to 18 GHz Add 30 kHz to 6 GHz Module	$6,530 $3,000
85099A	Type-F	30 kHz to 3 GHz	
85098A	7-16	30 kHz to 7.5 GHz	
85096A	Type-N 75 ohms	30 kHz to 3 GHz	
85092A	Type N 50 ohms	30 kHz to 6 GHz	$3,000
85064B Option 001	Type N 50 ohms	1 GHz to 18 GHz Add 30 kHz to 6 GHz Module	$6,530 $3,000
85093A	3.5 mm	30 kHz to 6 GHz	$3,000
85062B Option 001	3.5 mm	1 GHz to 26.5 GHz Add 30 kHz to 6 GHz Module	$6,530 $3,000

[1]The 30 kHz to 6 GHz module is specified to operate from 300 kHz, with typical performance down to 30 kHz.