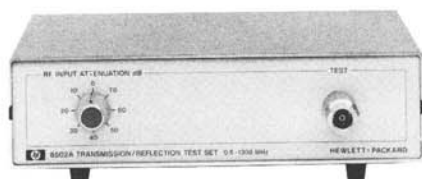
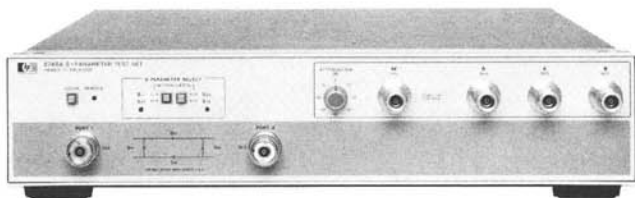


552 **NETWORK ANALYZERS**
RF Network Analyzer
Model 8754A (cont.)



HP 8502A



HP 8748A



HP 11850A



HP 11851A

HP 8748A 50 Ohm S-Parameter Test Set Specifications

Frequency Range: 4 to 1300 MHz. Option H26: 4 to 2600 MHz.

Directivity: ≥ 40 dB.

Option H26: 4 to 1300 MHz, ≥ 35 dB.

1300 to 1600 MHz, ≥ 30 dB.

Frequency Response¹:

Transmission (S_{21} , S_{12}): ± 1 dB, $\pm 8^\circ$.

Option H26 (2600 MHz frequency range):

4 to 1300 MHz: ± 1 dB, $\pm 8^\circ$.

1300 to 2600 MHz: ± 1.5 dB, $\pm 15^\circ$.

Reflection (S_{11} , S_{22}): ± 2 dB, $\pm 15^\circ$.

Option H26 (2600 MHz frequency range):

4 to 1300 MHz: ± 2 dB, $\pm 15^\circ$.

1300 to 2600 MHz: ± 3 dB, $\pm 20^\circ$.

Port Match²:

Test Port 1 and 2: ≥ 26 dB Return Loss (≤ 1.11 SWR).

Test Port 1 and 2 open/short ratio: ± 0.75 dB and $\pm 6^\circ$ from 4 to 1000 MHz, ± 0.9 dB and $\pm 7.5^\circ$ from 1000 to 1300 MHz.

Option H26:

Test Port 1 and 2:

4 to 1300 MHz, 22 dB Return Loss.

1300 to 2600 MHz, 17 dB Return Loss.

Test Port 1 and 2 open/short ratio:

4 to 1300 MHz: ± 1.2 dB, $\pm 10^\circ$.

1300 to 2600 MHz: ± 1.5 dB, $\pm 15^\circ$.

Insertion Loss:

Input to Test Port 1 or 2: 13 dB nominal.

Input to Port A, B or R: 19 dB nominal.

Option H26: same

Maximum Operating Level: +20 dBm.

RF Attenuator Range: 0 to 70 dB in 10 dB steps.

Test Port Connectors: APC-7.

DC Bias Input Range: ± 30 Vdc, ± 200 mA.

Includes: cables for connection to HP 8754 and Reference Plane Extension Cable Kit.

Recommended Accessory: HP 11857A Test Port Extension Cables, HP 11608A Transistor Fixture, or HP 11600B, 11602B Transistor Fixtures.

Power: 20Vdc, supplied from HP 8754 via interface cable (included).

Size: 432mmW x 90mmH x 495mmD (17" x 3½" x 19½").

Weight: net, 9.1 kg (20 lb); shipping, 11.3 kg (25 lb).

HP 8502A 50 Ohm Transmission/Reflection Test Set

HP 8502B 75 Ohm Transmission/Reflection Test Set

General: the HP 8502 contains a power splitter and directional bridge that permits simultaneous transmission and reflection measurements.

Detailed specifications on the HP 8502A and 8502B appear on page 558. The HP 8502A Option H26 is intended as an accessory to the HP 8754A Option H26 and allows 50 ohm transmission/reflection measurements up to 2600 MHz. For interconnections from the HP 8502 to the HP 8754A use the HP 11851A RF Cable Set. The major specifications of the HP 8502A option H26 are:

Frequency Range: 4 to 2600 MHz.

Directivity:

4 to 1300 MHz: ≥ 35 dB.

1300 to 2600 MHz: ≥ 30 dB.

Frequency Response:

Transmission:

4 to 1300 MHz: ≤ 0.9 dB, $\leq \pm 10^\circ$.

1300 to 2600 MHz: $\leq \pm 1.5$ dB, $\leq \pm 15^\circ$.

Reflection:

4 to 1300 MHz: $\leq \pm 1.8$ dB, $\leq \pm 10^\circ$.

1300 to 2600 MHz: $\leq \pm 3.0$ dB, $\leq \pm 15^\circ$.

Port Match:

Test Ports:

4 to 1300 MHz: ≥ 22 dB Return Loss (≤ 1.17 SWR).

1300 to 2600 MHz: ≥ 17 dB Return Loss (≤ 1.33 SWR).

Test Port Open/Short Ratio:

4 to 1300 MHz: $\leq \pm 1.2$ dB, $\leq \pm 10^\circ$.

1300 to 2600 MHz: $\leq \pm 1.5$ dB, $\leq \pm 15^\circ$.

Reference and Reflection Port:

4 to 1300 MHz: ≥ 22 dB (≤ 1.17 SWR).

1300 to 2600 MHz: ≥ 17 dB (≤ 1.33 SWR).

Input Port

4 to 1300 MHz: ≥ 20 dB (≤ 1.22 SWR).

1300 to 2600 MHz: ≥ 12 dB (≤ 1.67 SWR).

HP 11850A 50 Ω Three-Way Power Splitter

HP 11850B 75 Ω Three-Way Power Splitter

General: one output port provides the reference output and the other two output ports can be used for independent transmission measurements. Use the HP 11851A RF Cable Set for interconnections. Detailed specifications on page 558.

HP 11851A RF Cable Set

General: three 61 cm (24 in.) 50 Ω cables, phase matched to $\pm 4^\circ$ and one 86 cm (34 in.) 50 Ω cable. Used with HP 8502A/B and 11850A/B. Detailed specifications on page 559.

HP 11857A APC-7 Test Port Extension Cables

General: two precision 50 Ω cables phase matched to $\pm 2^\circ$ to connect text device between HP 8748A test ports. Detailed specifications on page 559.

Transistor Fixtures

General: three transistor fixtures can be used with the HP 8748A. The HP 11600B and 11602B require use of the HP 11858A Transistor Fixture Adapter. The HP 11608A transistor fixture connects directly to the HP 8748A. Detailed specifications on pages 572 and 574.

Adapter Kits

General: the HP 11853A, 11854A, 11855A, and 11856A accessory kits are available to provide precision Type N and BNC adapters and calibration standards for use with the HP 11850A/B, 8502A/B, and 8748A test setups. Detailed specifications on page 559.

¹ $^\circ$ degrees, specified as deviation from linear phase.

² Effective port match for ratio measurements.

Ordering Information

	Price
HP 8754A Network Analyzer	\$15,540
Opt H26: 4-2600 MHz	add \$1,830
Opt 908: Rack Flange Kit	add \$25
Opt 910: Extra Manual	\$80
Opt 913: Rack Mount Kit	add \$35
HP 11850A 50 Ω Three-Way Power Splitter	\$805
Opt H26: 4-2600 MHz (50 Ω)	add \$100
HP 11850B 75 Ω Three-Way Power Splitter	\$1,405
HP 8502A 50 Ω Transmission/Reflection Test Set	\$3,010
Opt H26: 4-2600 MHz (50 Ω)	add \$505
HP 8502B 75 Ω Transmission/Reflection Test Set	\$3,410
HP 11851A RF Cable Set	\$955
HP 11857A Test Port Extension Cables	\$1,005
HP 8748A 50 Ω S-Parameter Test Set	\$8,175
Opt 907: Front Handle Kit	add \$28
Opt 908: Rack Flange Kit	add \$17
Opt 909: Rack Mount Flange/Front Handle Kit	add \$55
Opt H26: 4-2600 MHz (50 Ω)	add \$1,955