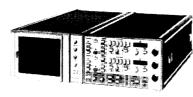
# Scalar Network Analyzer

## Model 560A, 10 MHz to 40 GHz





### 560A Scalar Network Analyzer Highlights

- Simultaneous Transmission and Return Loss or **Power Measurements**
- 10 MHz to 40 GHz Range from Single Coaxial Test Port
- 40 dB Directivity to 18 GHz, 30 dB to 40 GHz
- GPIB Programmability
- Memory-Enhanced Accuracy
- 71 dB Dynamic Range (+16 dBm to -55 dBm)

#### **GPIB Compatible Network Analyzer**

The 560A Scalar Network Analyzer makes automated, simultaneous measurement of transmission loss/gain and return loss or power over the 10 MHz to 40 GHz range. In its simplest configuration, an automated system consists of a 560A, a 560 Series SWR Autotester and Detector, a 6600B Sweep Generator, and a GPIB desktop controller. Available software includes programs for the HP 85, 9816S, 9826S, 9836S, and the Fluke 1722WB, 1722DN, 1722WE, and 1722WA. All software includes step-by-step normalization and measurement proce-

#### **Highest Return Loss Accuracy**

The accuracy with which return loss measurements are made result largely from the high directivity of the Wiltron SWR Autotesters. With directivities of 40 dB up to 18 GHz, 32 dB up to 26.5 GHz, and 30 dB up to 40 GHz, these SWR Autotesters are available with GPC-7, WSMA, Type N, and K Connector test ports. To eliminate the errors that would be introduced by adapters, the detectors are also available with the same selection of test ports. Detector return loss specifications of 22 dB from 0.04 to 8 GHz, 17 dB up to 20 GHz, 13 dB up to 26.5 GHz and 12 dB up to 40 GHz contribute significantly to the 560A's exceptional accuracy. The substantial errors introduced by multiplier-type oscillators are eliminated when a 6600B Sweep Generaor is used as the signal source.

#### **Memory-Enhanced Performance**

High accuracy is also ensured by the use of memory which stores and automatically subtracts system residual errors from the test data. The normalization procedure applies to power measurement as well, allowing direct measurements over the +16 dBm to -55 dBm range.

## **Specifications**

Frequency Range: 10 MHz to 40 GHz, determined by selection of SWR Autotester and detector. The 560-10BX and 560-10BX-1 Adap-

ter Cables provide interface to waveguide detectors.

Channels: Three, with selection of A, B, R, A-R, and B-R. Two channels are displayed simultaneously.

**Dynamic Range:** 71 dB (+16 dBm to -55 dBm) on channels A and B. 46 dB (+16 dBm to -30 dBm) on channel R.

Amplitude Resolution: 0.01 dB

Measurement Accuracy: Please see ACCURACY on page 34.

Temperature Range: Operating: 0°C to +50°C

Storage: -40°C to +70°C Power: 100V/120V/220V/240V +5%, -10%, 50-60 Hz, 85 VA max.

Dimensions:

560A Horizontal Model: 133 H x 429 W x 500 D mm (5.25 H x 16.9 W x 19.7 D in. + 3/8 in. for feet) 560A-2 Vertical Model: 267 H x 213 W x 500 D mm (10.5 H x 8.4 W x 19.7 D in. + 3/8 in. for feet)

560A Option 1 Rack Mount: 133 H x 483 W x 500 D mm

(5.25 H x 19 W x 19.7 D in.)

Weight:

560A and 560A-2: 11 kg (24.5 lb) 560A Option 1: 13.5 kg (30 lb)

## Ordering Information

560A Scalar Network Analyzer, Horizontal Configuration . \$8,50	
SWR Autotesters:       560–97A50, 10 MHz to 18 GHz, 36 dB directivity       \$1,90         560–97A50–1, 10 MHz to 18 GHz, 40 dB directivity       \$2,20         560–97N50, 10 MHz to 18 GHz, 35 dB directivity       \$2,00         560–97N50–1, 10 MHz to 18 GHz, 38 dB directivity       \$2,00         560–97NF50, 10 MHz to 18 GHz, 35 dB directivity       \$2,00         560–97NF50–1, 10 MHz to 18 GHz, 38 dB directivity       \$2,30         560–98K50, 10 MHz to 40 GHz, 30 dB directivity       \$3,10         560–98K50, 10 MHz to 40 GHz, 30 dB directivity       \$3,20         560–98S50, 10 MHz to 26.5 GHz, 32 dB directivity       \$2,40         560–98SF50, 10 MHz to 26.5 GHz, 35 dB directivity       \$2,90         560–98SF50, 10 MHz to 26.5 GHz, 35 dB directivity       \$2,90         560–98SF50, 10 MHz to 26.5 GHz, 35 dB directivity       \$2,50         560–98SF50, 10 MHz to 26.5 GHz, 35 dB directivity       \$3,00	00 00 50 50 50 00 00
Detectors:         560-7A50, 10 MHz to 18 GHz, GPC-7       \$5         560-7K50, 10 MHz to 40 GHz, K Male       \$6         560-7N50, 10 MHz to 18.5 GHz, N Male       \$5         560-7S50, 10 MHz to 18.5 GHz, WSMA Male       \$5         560-7S50-2, 10 MHz to 26.5 GHz, WSMA Male       \$6         560-7S50-3, 10 MHz to 34 GHz, WSMA Male       \$6	75 25 25 00
Sweep Generators Please see page 58 for selection.  Accessories: Please see page 36 for 560A accessories.	
Options: Rack Mounting for 560A, Option 1	50
GPIB Field Installation Kit, P/N 560–A–7094	60