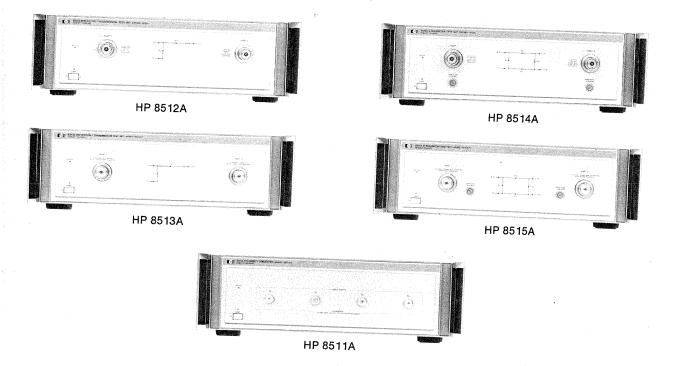


Models 8511A, 8512A, 8513A, 8514A, 8515A



### HP 8512A Reflection/Transmission Test Set

The HP 8512A Reflection/Transmission Test Set provides the capability to simultaneously measure the complex reflection and transmission characteristics of a test device from 45 MHz to 18 GHz in transmission and 500 MHz to 18 GHz in reflection. Reflection measurements to 45 MHz are achievable with some loss (about 30dB) in dynamic range. An HP 8512A-based system offers very broad dynamic range with the highest accuracy available. The test ports have rugged precision 7-mm connectors and may be adapted to other interfaces with the appropriate precision adapters. The test set includes an integrated three-channel frequency converter.

## HP 8513A Reflection/Transmission Test Set

The HP 8513A Reflection/Transmission Test Set provides the capability to simultaneously measure the complex reflection and transmission characteristics of a test device over the 45 MHz to 26.5 GHz frequency range. An HP 8513A-based system offers the capability to measure a network across an extremely wide frequency range with just one connection, over a wide dynamic range with high accuracy. The test ports are a special, ruggedized, version of the precision 3.5mm connector interface that is completely compatible with any connector in the 3.5 mm family. The test set includes an integrated threechannel frequency converter.

# HP 8514A S-Parameter Test Set

The HP 8514A S-Parameter Test Set provides the capability to measure all four S-parameters of a two port device with a single con-Rection over the 500 MHz to 18 GHz frequency range. Measurements to 45 MHz are achievable with some loss (about 30 dB) in dynamic range. The S-parameter test set architecture is ideal for measuring two-port devices where it is not convenient to physically reverse the device to measure the reverse parameters, or for networks that need to be adjusted while being measured with full error-correcemployed. The test ports have rugged precision 7-mm connectors

and may be adapted to other connector interfaces with the appropriate precision adapters. Along with an integrated, four-channel frequency converter, the test set includes two 90-dB step attenuators for changing the incident power level at the test port and two bias networks for applying dc bias to the test port center conductor in active device test applications.

#### HP 8515A S-Parameter Test Set

The HP 8515A S-Parameter Test Set provides the capability to measure all four S-parameters of a two-port device with a single connection over the 45 MHz to 26.5 GHz frequency range. The S-parameter test set architecture is ideal for measuring two port devices where it is not convenient to reverse the device to measure the reverse parameters, or for networks that need to be adjusted while being measured with full error-correction employed. The test ports are a special, ruggedized, version of the precision 3.5 mm interface that is completely compatible with any connector in the 3.5 mm family. Along with an integrated, four-channel frequency converter, the test set includes two 90-dB step attenuators for changing the incident power level at the test port and two bias networks for applying de bias to the test port center conductor in active device test applications.

### HP 8511A Frequency Converter

The HP 8511A is a four-channel frequency converter covering the 45 MHz to 26.5 GHz frequency range. An HP 8510/8511A combination results in a system that can be customized to unique test requirements with the addition of customer-supplied test setup hardware. Examples include multi-port device measurements, antenna characterization and radar cross section measurements. Each of the four inputs operates over the full dynamic range of the system, from 85 dB to 100 dB. Isolation between channels is typically greater than 100 dB. Dynamic accuracy is better than  $\pm 0.05$  dB and  $\pm 0.2$ degree at a test channel level of -50 dBm.