NETWORK ANALYZERS
Complete Characterization of Linear Networks (cont'd)

Network Analyzer Product Line Summary

HP Model	Frequency Range	Source	Measurement Capabilities
HP 35665A Dual-Channel Dynamic Signal Analyzer (page 220)	122 μHz to 51.2 kHz	Swept and fixed sine chirp, random, burst random, and arbitrary waveform	Transfer functions, magnitude/phase, 20-pole/20-zero curve fitter, frequency-response synthesis, time-domain functions, and spectrum analysis. HP-IB programmable.
HP 3563A/3562A Dual-Channel Control Systems Analyzer (page 221)	64 μHz to 100 kHz	Analog and digital swept and fixed sine, chirp, burst chirp, random noise, burst random noise, step, pulse, ramp, and arbitrary	Transfer functions, magnitude/phase, 40-pole/40-zero curve fitter (S- and Z-domains), frequency-response synthesis (S- and Z-domains), time-domain functions, and spectrum analysis with analog or digital input signals. HP-IB programmable. Note: 3562A provides analog interface only.
HP 3577B Network Analyzer (page 283)	5 Hz to 200 MHz	Integrated synthesized source	Transfer functions, magnitude/phase, group delay, S-parameters, insertion loss, gain/attenuation, electrical length, gain compression, SWR, impedance, HP Instrument BASIC optional. HP-IB programmable.
HP 3589A Spectrum/Network Analyzer (page 232)	10 Hz to 150 MHz	Integrated synthesized source	Transfer functions, magnitude/phase, group delay, S-parameters, impedance, SWR, spectrum analysis, including gating. HP Instrument BASIC optional. HP-IB programmable.
HP 4195A Network/Spectrum/ Impedance Analyzer (page 285)	10 Hz to 500 MHz	Integrated synthesized source	Transfer functions, magnitude/base, insertion loss/gain, attenuation, group delay, S-parameters, return loss, SWR, complex impedance, accuracy enhancement. HP-IB programmable.
HP 8751A Network Analyzer (page 287)	5 Hz to 500 MHz	Integrated synthesized source	Transfer functions, magnitude/phase, insertion loss/gain, attenuation, gain compression, S-parameters, electrical length, group delay, deviation from linear phase. Impedance-magnitude/phase: return loss, R + jX. Full accuracy enhancement. HP Instrument BASIC capability. Built-in 3.5-in flexible disk (LIF/DOS format). HP-IB capability.
HP 87510A Gain/Phase Analyzer (page 289)	100 kHz to 300 MHz	Integrated synthesized source	Transfer functions, magnitude/phase, insertion loss/gain, group delay, attenuation. Impedance-magnitude/phase. Electrical delay. HP IBASIC capability. Built-in 3½-in flexible disk (LIF/DOS format). HP-IB capability.
HP 8752A/B Network Analyzer (page 294)	300 kHz to 1.3/3.0 GHz	Integrated synthesized source, test set and receiver	Transfer functions - magnitude/phase, insertion loss/gain, attenuation, gain compression, S-parameters, electrical length, group delay, deviation from linear phase. Impedance-magnitude/phase, return loss, r + jx, accuracy enhancement, time-domain capability. HP-IB programmable.
HP 8753C Network Analyzer (page 296)	300 kHz to 3 GHz/6 GHz	Integrated synthesized source 8752A: 50 Ω 8752B: 75 Ω	Transfer functions – magnitude/phase, insertion loss/gain, attenuation, gain compression, S-parameters, electrical length, group delay, deviation from linear phase. Impedance - magnitude/phase - Return Loss, r + jx. Full accuracy enhancement. Time-domain capability. Harmonic measurement capability. HP-IB programmable.
HP 8719C/8720C/8722C Network Analyzers (page 302)	50 MHz to 13.5 GHz (8719C) 50 MHz to 20 GHz (8720C) 50 MHz to 40 GHz (8722C)	Integrated synthesized source (1 Hz resolution optional)	Transfer functions - magnitude/phase, insertion loss/gain, attenuation, S-parameters, electrical length, group delay, deviation from linear phase. Impedance - magnitude/phase - Return Loss, r + jx. Full accuracy enhancement. Time-domain capability. HP-IB programmable.
HP 8510 Series Network Analyzers (page 305)	45 MHz to 110 GHz	HP 8350 Series Sweep Oscillators HP 8340B, 8341B Synthesized Sweepers HP 8360 Series Synthesized Sweepers	Transfer functions - magnitude/phase, insertion loss/gain, attenuation, S-parameters, electrical length, group delay, deviation from linear phase, impedance, return loss, R + jx. Active device characterization. Full accuracy enhancement. Time-domain capability. HP-IB programmable.

Vector Voltmeter

HP Model	Frequency Range	Source	Measurement Capabilities
HP 3575A Gain Phase Meter (page 283)	1 Hz to 13 MHz	None	Gain, phase, and amplitude
HP 8508A Vector Voltmeter (page 291)	0.1 MHz to 1 GHz 0.3 MHz to 2 GHz	None	Voltage, impedance Transfer functions, phase and amplitude HP-IB programmable

Scalar Analyzer

HP Model	Frequency Range	Source	Measurement Capabilities
HP 8757D/E Scalar Network Analyzers (page 275)	10 MHz to 110 GHz	HP 8350B Sweeper HP 8340B or 8341B Synthesized Sweepers HP 8360 Series Synthesized Sweepers	Scalar transmission/reflection measurements 50 Ω coax measurements 10 MHz to 50 GHz 75 Ω coax measurement 10 MHz to 2.4 GHz Waveguide measurements 26.5 to 110 GHz Open/short averaging, normalization, averaging, limit testing Storage registers, HP-IB programmable
HP 8711A RF Network Analyzer (page 292)	300 kHz to 1.3 GHz	Integrated synthesized source, T/R test set and receiver	Transmission/reflection measurements 50 Ω and 75 Ω measurements HP Instrument BASIC (IBASIC) Narrowband/broadband receivers Internal calibration, averaging, limit testing, internal disk and storage registers