



## TELECOMMUNICATIONS & DATA COMMUNICATIONS TEST

Wide Area Network Protocol Analyzers (50 bit/s to 2.048 Mb/s)  
HP 4957A, 4957PC, and 4959B

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- Data monitoring
- Real-time decodes of all major protocols
- Extensive data filtering
- Complete error analysis

- Real-time statistical measurements
- Link simulation and emulation
- Full bit error rate testing



### HP WAN Protocol Analyzers

Hewlett-Packard wide area network protocol analyzers solve even the toughest communications problems cost-effectively and efficiently. Whether you are installing customer equipment, troubleshooting network problems, or verifying the operation of your design, HP has the right analyzer to meet your needs.

HP's WAN protocol analyzers offer the best combination of price and performance in the industry—and provide the capabilities that are most important to you. Including the ability to do LAN/WAN internetwork testing of LAN traffic over wide area networks.

Test from 50 bit/s Async to 2.048 Mb/s on all major WAN interfaces. Each WAN protocol analyzer provides the measurements you need to troubleshoot network problems quickly and easily.

### Unmatched Power

HP WAN protocol analyzers let you isolate data communications problems on virtually all networks. Hewlett-Packard guarantees 100% capture and analysis of your data during full line loading.

**All Major Interfaces Are Supported:** RS-232/V.24; RS-449 422/423; V.10/V.11; RS-530; V.35; X.21, ISDN basic rate (S, T, and U); ISDN primary rate interface; T1 (1.544 Mb/s); CEPT (2.048 Mb/s); supports lines from 50 bit/s to 2.048 Mb/s full duplex, 100% line utilization.

**Support for All Major Protocols:** X.25; SNA; HDLC; SDLC; frame relay; SMDS; ISDN; X.21; SS#7; Bisync; asynchronous; IPARS; full capture of proprietary synchronous protocols. In addition, the HP 4959B analyzes all types of LAN traffic on 56 Kb/s to 2 Mb/s.

**Complete Bit Error Rate Testing to 2 Mb/s**, including full G.821 statistics and the ability to log results to disk to catch intermittent problems.

**Prewritten Tests** are turnkey diagnostic solutions that count errors, measure network performance, initialize communication software, and preconfigure data filters and test setups.

**Full Protocol Simulation** actively tests network device operation by emulating the network or a network device.

**Capture Intermittent Problems;** large Data Capture Buffers available from ½ MB on the HP 4957A to 30 MB on the HP 4959B.

**Full Remote Control** lets you bring the specialist to the remote site instantly with the PC-based remote troubleshooter software. Completely control a remotely located HP protocol analyzer from your PC with virtual remote control, file transfer, and PC data analysis.

### Unparalleled Ease of Use

Resolve problems faster and start troubleshooting from the moment you turn the analyzer on.

**Autoconfigure:** Automatically determine line parameters in seconds.

**HP Toolkit User Interface:** Access tests, configurations, and automatically execute tests with the press of a single key.

**Prewritten Tests for All Major Protocols**

**Customizable Displays** so you view only the information that is important to you.

**Built-In Help Screens**

### Quality, Rugged Instruments with Full HP Support

- HP engineering and support protect your investment and allow you to focus on solving customer problems.
- Three-year warranties available on all hardware
- Ruggedized packages stand up in even the toughest environments
- Free help line and bulletin board service
- Worldwide service and support
- Superior documentation
- Training classes

### HP 4957A

A portable, rugged, easy-to-use protocol analyzer that supports all major interfaces and protocols. Monitor, decode, simulate protocols, and run BERT to 64 Kb/s.

### Specifications

**Package:** 5.8 kg (12.8 lbs), rugged and compact

**Data Rates:** 64 Kb/s monitor, simulation, and BERT; 256 Kb/s fast capture monitor (optional)

**User Interface:** Softkey-driven, high resolution 13-cm (5-inch) display

**Interfaces:** Built-in RS-232, V.35, RS-449; optional ISDN BRI and PRI, and X.21

**Memory:** ½ MB capture buffer, 128 KB nonvolatile RAM, and 613 KB floppy

**Hard Disk:** None

**MS-DOS-Based:** No

**Extensibility:** Additional software applications for SNA, ISDN, frame relay, DDCMP, etc.

# TELECOMMUNICATIONS & DATA COMMUNICATIONS TEST

## Wide Area Network Protocol Analyzers (50 bit/s to 2.048 Mb/s)

HP 4957A, 4957PC, and 4959B (cont'd)

### HP 4957PC

A PC-based protocol analyzer with the full capability and performance of the HP 4957A on a PC card. (Note: physical interfaces are not built in.) The HP 4957PC supports all major interfaces and protocols. Monitor, decode, simulate protocols, and run BERT to 64 Kbps.

#### Specifications

**Size:** Full-length, 33.4 cm (13.15 inch) may be shorted by removing tab to 1/2 length 27.9 cm (11 in).

**Weight:** 0.3 kg (0.6 lb)

**Data Rates:** 64 Kb/s monitor, simulation, and BERT; 256 Kb/s fast capture monitor (optional)

**User Interface:** HP Toolkit single-key user interface. HP Toolkit runs any MS-DOS application. Display depends on PC.

**Interfaces:** External optional RS-232, V.35, RS-449, ISDN BRI and PRI, X.21

**Memory:** 1/2 MB capture buffer; 128 KB non-volatile RAM. Circular store data to hard drive or buffer.

**Hard Disk:** Yes, size depends on PC

**MS-DOS-Based:** Yes

**Extensibility:** Additional software applications

### HP 4959B (64 Kb/s configuration)



A standalone 64 Kb/s protocol analyzer that offers the best features of both the HP 4957A and HP 4957PC. It combines the built-in interfaces and rugged, portable packaging of the HP 4957A - plus the Toolkit user interface and the built-in computer that runs any DOS applications that are found in the HP 4957PC. The HP 4959B (64 Kb/s version) supports all major interfaces and protocols. Monitor, decode, simulate protocols, and run BERT to 64 Kb/s.

#### Specifications

**Package:** 10.9 kg (24 lbs), rugged and integrated with V-series interfaces

**Data Rates:** 64 Kb/s monitor, simulation, and BERT; 256 Kb/s fast capture (optional)

**User Interface:** HP Toolkit single key user interface. HP Toolkit runs any MS-DOS application.

**Display:** 10.5-in monochrome LCD with optional high-resolution color display

**Interfaces:** Built-in RS-232, V.35, RS-449, with optional ISDN BRI and PRI, and X.21

**Memory:** 1/2 MB capture buffer, 128 KB nonvolatile RAM, and 1.44 MB floppy. Circular store data to hard disk.

**Hard Disk:** 86 MB standard, 172 MB optional

**MS-DOS-Based:** Yes, Intel 386SX

**Extensibility:** Same as HP 4957A; able to run any DOS application; spare AT full card slot.

### HP 4959B (T1/CEPT configurations)



A standalone protocol analyzer that supports testing from 50 bit/s to 2.048 Mb/s. Full T1/CEPT test capabilities have been added to the spare card slot of the HP 4959B 64 Kb/s analyzer. Ideal for LAN interconnect testing with support for frame relay, X.25, SMDS, and any bit-oriented protocol, including decodes for encapsulated LAN protocols.

#### Specifications

**Package:** 11.4 kg (25 lb), rugged and integrated with V-series and T1 or CEPT interfaces. Also available as a PC card for T1 or CEPT analysis.

**Data Rates:** Full monitoring, data transmission, and BERT to 2.048 Mb/s.

**User Interface:** HP Toolkit single key user interface. HP Toolkit runs any MS-DOS application. 10.5-in monochrome LCD with optional high-resolution color display.

**Interfaces:** Built-in RS-232, V.35, RS-449, and T1 or CEPT interfaces; optional ISDN BRI and PRI, and X.21

**Memory:** High-speed analysis supports 2 MB (optional 30 MB) capture buffer

**Hard Disk:** 86 MB standard, 172 MB optional

**MS-DOS-Based:** Yes, Intel 386SX

**Extensibility:** Same as HP 4957A; able to run any DOS application

#### Ordering Information

**HP 4957A** **Price**  
\$7,350

Includes RS-232/V.24, RS-449, V.35 Interfaces and Y-Cables; Datacomm Test Library

**Opt 001** High-Speed Monitoring to 256 Kb/s \$495

**Opt 003** Katakana Character Set \$250

**HP 4957PC** \$2,985

Includes Datacomm Test Library

**Opt 001** High-Speed Monitoring to 256 Kb/s \$495

**Opt 003** Katakana Character Set \$250

**Opt 101** RS-449 Interface Pod \$650

**Opt 103** RS-232/V.24 Interface Pod \$650

**Opt 104** X.21 Interface Pod \$810

**Opt 105** V.35 Interface Pod \$1,100

**HP 4959B** 64 Kb/s version and T1/CEPT versions \$10,995 - \$18,995

#### HP J2213A PC Mainframe (required)

**Opt AMZ** Replace 86 MB hard disk with 172 MB hard disk

**Opt 1B5** Replace 2 MB RAM with 8 MB RAM

**Opt ADW** Replace monochrome VGA display with color VGA display

#### Interface Modules (One is required)

##### HP J2208B 64 Kb/s Version

Includes RS-232, V.35, and RS-449 interfaces, 1/2 MB of capture buffer, RS-232 Y-cable, and empty PC card slot.

**Opt 003** Katakana Character Set

##### HP J2272A T1 Version

Includes RS-232, V.35, RS-449, RJ-48C, mini bantam and RJ-11 interfaces, 2 MB of capture buffer, and RS-232 Y-cable.

**Opt 001** Replace 2 MB with 30 MB capture buffer

**Opt 003** Katakana Character Set

##### HP J2273A CEPT-E1 Version

Includes RS-232, V.35, RS-449, BNC and RJ-11 interfaces, 2 MB of capture buffer and RS-232 interface Y-cable.

**Opt 001** Replace 2 MB with 30 MB capture buffer

**Opt 201** Replace BNC with BR2 connectors

**Opt 202** Replace BNC with 1.6/5.6 connectors