

DATA COMMUNICATIONS TEST EQUIPMENT

Protocol Analyzer

Model HP 4954A

HP 4954A Protocol Analyzer

The HP 4954A is a high-speed (72 kbps), multiprotocol, expandable protocol analyzer for designing data communication products and analyzing network performance.

Features

High speed state-of-the-art multiprocessor design guarantees reliable sophisticated analysis and simulation of full-duplex bit-oriented protocols to 72 kbps and data capture of half duplex bit-oriented protocols at lower-line utilizations up to 256 kbps.

Multiprotocol testing capabilities allow you to monitor, analyze, and simulate popular protocols such as X.25, SNA/SDLC, bisync, async, DDCMP, X.75, HDLC, BSC-framed X.25, and character-oriented synchronous protocols. X.21 and CCITT# 7/CCS7 support is also available through easy to use application software.

Mass storage with an integral 20 MB hard disk and 613 KB 3.5 inch floppy disk provide easy access to set up menus and buffer data. Any HP 4954A file may be autoloaded at power on to instantly configure the protocol analyzer for your individual needs. Setup menus, user-written programs and buffer data stored to floppy disk may be shared with the HP 4951C and HP 4952A.

The internal 256 KB data capture buffer can be expanded through the integral hard disk up to 20 MB. Even greater data capture buffers are possible with external HP-IB disk drives.

Programming flexibility through high-level protocol analysis and simulation is a standard capability of the HP 4954A. Custom measurements and tests are easy to perform with softkey-driven entry of monitor and simulation programs with triggering based upon data communication events. For more advanced testing, the DataCommC programming language provides a powerful solution to fit a variety of testing needs.

Electromagnetic compatibility: Tested for compliance with VDE 0871 level B. radiated and conducted.

Datacomm Solutions

Expandability is provided with extensive application software memory which makes the HP 4954A one of the most versatile protocol analyzers available. Many software and hardware accessories are now available to broaden the HP 4954A analysis and simulation capabilities.

DataCommC Programming Language

DataCommC supports the Kernighan & Ritchie C language, plus a full set of data communication-specific libraries. DataCommC includes a full-screen windowing text editor, terminal emulator, Kermit file transfer protocol, compiler, linker, and a multitasking operating system.

ISDN Testing System

The ISDN channel access unit and ISDN analysis software application are designed to aid in the development of ISDN equipment. The ISDN test system provides extensive monitoring, simulation, and emulation capabilities required to fully test the ISDN protocol over a basic rate (BRI) or primary rate (PRI) (1.544 Mbps or 2.048 Mbps) ISDN interface.

X.25 Test Environment

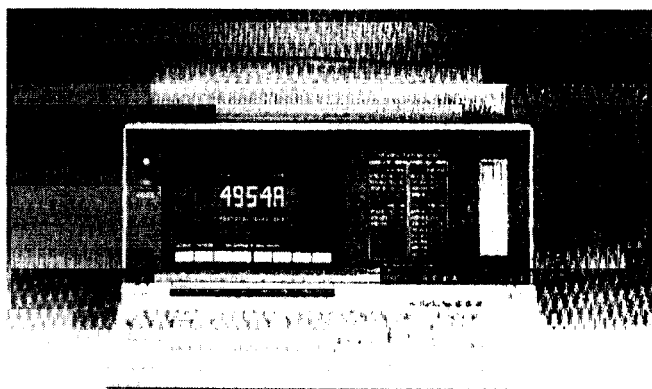
The X.25 test environment provides the ability to emulate an X.25 device and to monitor an X.25 line. The X.25 test environment provides an interactive tester, enhanced X.25 decode, emulation-specific runtime shell, levels 1,2, and 3 emulators, and over 80 X.25-specific library functions.

SNA Development System

The HP 18360A SNA emulation language is an HP 4954A software solution that is designed to aid in the development of SNA-compatible devices. It consists of an SNA-specific programming language plus complete link and path control emulators. The HP 18361A SNA 3270 device exerciser and HP 18362A LU6.2 node exerciser are user-modifiable tests written in the SNA emulation language to thoroughly test 3270 and LU6.2 devices.

X.21 Development System

The HP 18352A X.21 state simulator is an HP 4954A software solution that is specifically designed to aid in the development of X.21 DTEs and DCEs. It consists of an X.21-specific softkey-driven programming language combined with a state level decode. Included with the X.21 state simulator is the X.21 DTE analysis pack: a set of user-modifiable tests written in the X.21 state simulator language that thoroughly tests an X.21 DTE for protocol conformance.



HP 4954A

X.25 Network Performance Analyzer

The HP 18370A X.25 network performance analyzer is an HP 4954A software solution that gathers statistical information about the performance of an X.25 data link. Statistics on throughput, utilization, bad FCSS, reject frames, and many other parameters are available in both tabular and graphical format.

SNA/Bisync Network Performance Analyzer

The HP 18371A SNA/bisync network performance analyzer consists of two software programs designed to aid in the management of IBM and IBM-compatible data networks. Statistical information can be gathered about the performance of an SNA or bisync data link. When analyzing an SNA data link, statistics on session control BIU, link setup, binds, unbinds, and many other parameters are available in both tabular and graphical format. Similar measurements are provided when analyzing bisync data.

Physical Specifications

Dimensions: 19.6 cm x 42.5 cm x 56.5 cm (7.7 in. x 16.7 in. x 22.2 in.) rack mountable

Weight: 21.17 kg (46.7 lb)

Ordering Information

| | Price |
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| HP 4954A: Protocol Analyzer (interface pod not included) | \$16,300 |
| Opt. 001 Adds 1.0 MB of RAM | \$1,500 |
| Opt. 100 Adds RS-232C/V.24 interface pod | \$1,150 |
| Opt. 101 Adds RS-449 interface pod | \$1,150 |
| Opt. 102 Adds V.35 interface pod | \$1,450 |
| Opt. 103 Adds MIL-188C interface pod | \$1,150 |

Application Software

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| HP 18320A DataCommC programming language | \$2,000 |
| HP 18321A X.25 test environment | \$2,000 |
| HP 18352A X.21 state simulator | \$4,000 |
| HP 18355A CCITT#7/CCS7 analysis | \$1,600 |
| HP 18356A ISDN BRI channel selector and s/w | \$4,800 |
| HP 18360A SNA emulation language | \$2,500 |
| HP 18361A 3270 device exerciser | \$1,000 |
| HP 18362A LU6.2 node exerciser | \$2,000 |
| HP 18363A password security | \$450 |
| HP 18369A asynchronous terminal emulator | \$300 |
| HP 18370A X.25 network performance analysis | \$1,200 |
| HP 18371A SNA/BSC network performance analysis | \$1,200 |
| HP 4954I ISDN WAN protocol analyzer (includes HP 4954A, HP 18320A, and HP 18356A) | \$22,500 |
| Opt. 200 1.544 Mbps primary only access | TBD |
| Opt. 201 BRI and 1.544 Mbps primary access | TBD |
| Opt. 202 2.048 Mbps primary only access | TBD |
| Opt. 203 BRI and 2.048 Mbps primary access | TBD |