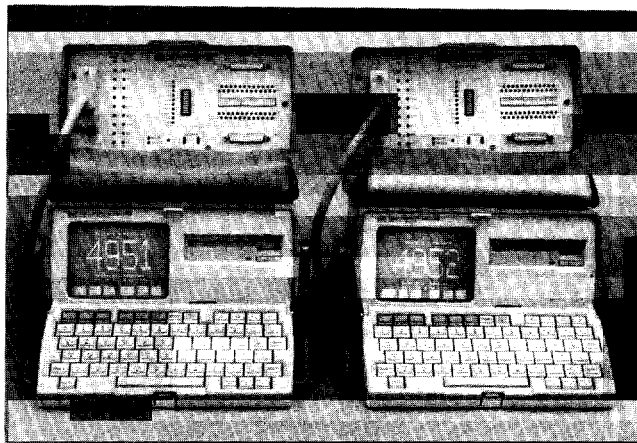


# DATA COMMUNICATIONS TEST EQUIPMENT

## Protocol Analyzers

Model HP 4951C and HP 4952A



HP 4951C/HP 4952A

### HP 4951C and HP 4952A Protocol Analyzers

The HP 4951C (19.2 kbps) and HP 4952A (64 kbps synchronous) are portable protocol analyzers used for troubleshooting during installation, maintenance and design of data communication networks and equipment.

#### Applications

The HP 4951C and HP 4952A allow you to monitor and decode data transmission, test remote facilities from your location, simulate network components, and perform bit error rate tests. They can also be used as asynchronous terminals or to install and maintain 3270 equipment, and to perform link level performance analysis. Protocols that can be tested include Async, BSC, SDLC (NRZI), HDLC, X.25, SNA, DDCMP and user-defined protocols. The HP 4952A also tests X.21.

#### HP 4951C and HP 4952A Features

- **Autoconfigure** to automatically determine line parameters and to monitor data with the push of a key.
- **3 1/2" microfloppy disc** to store 618K bytes of data, timing, lead status, programs and configurations.
- **RS-170 video port** to view data externally.
- **Printouts** to all RS-232C/V.24 ASCII printers via a separate port.
- **Nonvolatile memory** to store data, programs and configurations.

#### Additional HP 4952A Features

- **64 kbps**
- **3/4M byte extended volatile capture buffer** (Option 002)
- **128K bytes nonvolatile application storage** (Option 002)
- **Unattended remote testing** except 3/4 M byte optional buffer
- **Cursor timing** to allow timing measurements to be made on screen
- **Enhanced programming features:** run time user comments, softkey triggering, subroutines
- **Buffer data filtering** to maximize capture buffer
- **Selective store to disc** to capture only events of interest
- **Complete disc copying capability**

#### Datcomm Testing Solutions

##### X.25 and SNA Link Level Performance Analysis

Link level statistics packages, the HP 18333D for the HP 4951C and the HP 18264A for the HP 4952A, transform the instruments into statistical performance analyzers for the link level (level 2) of SNA and X.25 networks (SDLC and HDLC).

These solutions provide a new way for network troubleshooters to look at data communication links. Key link events indicate the health of the network and are displayed in columns. Bar charts show line utilization real time. These statistics can be stored to disc and reviewed at a later time.

##### 3270 Installation and Maintenance

If you have IBM 3270 or compatible terminal systems, you know that problems with newly installed or suspect systems can devastate hosts and users. The HP 18332D (HP 4951C) and HP 18263A (HP 4952A) 3270 installation and maintenance software packages provide easy, automatic, offline testing of multiple 3270 clusters by emulating many of the functions of a host computer.

##### Data Communications Test Library

This library of prewritten tests, is standard with every HP 4951C and HP 4952A at no additional cost. The library contains 58 general purpose monitor and simulate programs on a single 3 1/2" diskette to help you evaluate your network quickly and easily. Programs are written to diagnose common datacomm problems. The tests can be tailored for special configurations and applications. The library also contains installation and acceptance tests for printers and terminals.

##### X.25 Troubleshooting

Both analyzers provide X.25 troubleshooting. The HP 4952A also has an enhanced X.25 analysis package (HP 18266A) which allows you to create five custom X.25 decode displays. A decode is also provided to decode all components of each packet including facilities, calling/called addresses, cause and diagnostic codes, registration and call user data. The HP 18267A X.25 Test Library and Emulator provides a library of X.25 tests written in an emulator, and a procedure for using tests to troubleshoot X.25 installations.

##### Ordering Information

	Price
<b>HP 4951C Protocol Analyzer</b> (interface pod not included)	\$3,825
<b>Opt 101</b> HP 18174A RS-449/422A/423A interface pod	\$500
<b>Opt 102</b> HP 18180A RS-232C/V.24 and RS-449/422A/423A interface pod	\$900
<b>Opt 103</b> HP 18179A RS-232C/V.24 interface pod with full breakout box	\$650
<b>Opt 105</b> HP 18177A V.35 interface pod	\$800
<b>Opt 106</b> HP 18160A RS-232C/V.24 and V.35 interface pod	\$1,350
<b>Opt W30</b> 2 Years additional hardware service	\$170
<b>HP 18331D</b> SNA, DDCMP, X.25 analysis	\$350
<b>HP 18332D</b> 3270 installation and maintenance	\$350
<b>HP 18333D</b> X.25 and SNA link level performance analysis	\$350
<b>HP 18347A/X</b> HP 4951C training course	\$300
<b>HP 4952A Protocol Analyzer</b> (interface pod not included)	\$6,750
<b>Opt 002</b> Extended memory plus	\$1,500
<b>Opt 101</b> HP 18174A RS-449/422A/423A interface pod	\$500
<b>Opt 102</b> HP 18180A RS-232C/V.24 and RS-449/422A/423A interface pod	\$900
<b>Opt 103</b> HP 18179A RS-232C/V.24 interface pod with full breakout box	\$650
<b>Opt 104</b> HP 18260A X.21 and RS-232C/V.24 interface pod	\$1,000
<b>Opt 105</b> HP 18177A V.35 interface pod	\$800
<b>Opt 106</b> HP 18160A RS-232C/V.24 and V.35 interface pod	\$1,350
<b>Opt W30</b> 2 Years additional hardware service	\$210
<b>HP 18261A</b> SNA analysis	\$350
<b>HP 18263A</b> 3270 installation and maintenance	\$350
<b>HP 18264A</b> X.25 and SNA link level performance analysis	\$500
<b>HP 18265A</b> DDCMP analysis	\$350
<b>HP 18266A</b> Enhanced X.25 analysis	\$500
<b>HP 18267A</b> X.25 test library and emulator	\$500
<b>HP 4951C and HP 4952A Common Accessories</b>	
<b>HP 18190A</b> Soft vinyl carrying case	\$125
<b>HP 92192A</b> Box of 10 3 1/2" double sided discs	\$49
<b>HP 2225D</b> RS-232C/V.24 ThinkJet printer	\$495
<b>9211-1291</b> Hard transit case	\$420
<b>HP 92204N</b> Data tracker breakout box	\$240