The HP 16500C Logic Analysis System Mainframe and HP 16501A Expansion Frame

Technical Specifications

Mass Storage

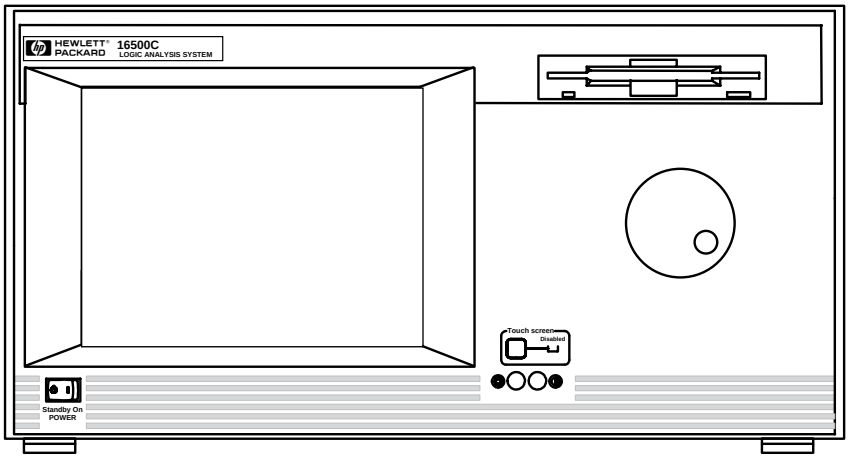
Hard Disk Drive	MS-DOS® compatible formatted disk drive IDE interface bus
Floppy Disk Drive	
Capacity	1.44 MB formatted
Media	3.5 inch floppy
Formats	MS-DOS or LIF

Internal RAM Memory

Standard	8 MB
Option 001	16 MB

LAN, IEEE 802.3

Physical Connectors	RJ-45 connector for direct connection to 10Base-T ("ether-twist") networks BNC connector for direct connection to 10Base2 ("thinlan") networks
Protocols Supported	TCP/IP NFS FTP SNMP
Program Interface	Instrument settings and operating modes may be remotely programmed through data files transmitted via NFS protocol.



Data Files	ASCII formatted data is available from modules as indicated in the table below. Screen images are available in black and white or color TIFF and PCX file formats.

X Windows Support	The HP 16500C supports the X Windows system version 11, release 5, as a client.

LAN NFS Support Matrix

Features	Measurement Modules		
	HP 16517A HP 16518A HP 16550A HP 16554A HP 16555A/D HP 16556A/D	HP 16533A HP 16534A	HP 16522A
ASCII Data Files	State per Label Timing per Label	Digitized Analog Data	Download Vector Files
Binary Data	Yes	Yes	No
Status Files	Yes	Yes	No
Program Files	Yes	Yes	Yes

Other Interfaces

RS-232-C, 9-Pin Connector

RS-232-C Configurations

Protocols	Xon/Xoff, None
Data bits	8
Stop bits	1, 1 1/2, 2
Parity	none, odd, even
Baud rates	110, 300, 600, 1200, 2400, 4800, 9600, 19200

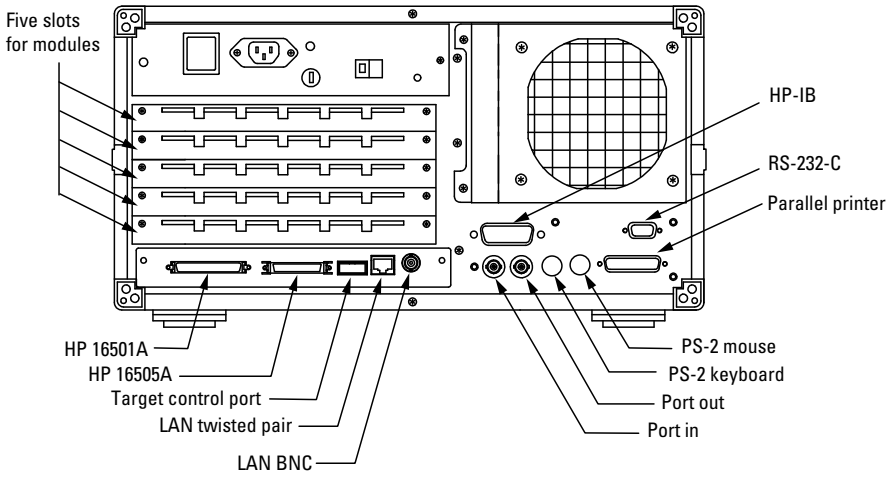
HP-IB (IEEE488)

HP-IB interface functions	SH1, AH1, T5, TE0, L3, LE0, SR1, RL1, PP1, DC1, DT1, C0, E2

Centronics Parallel

Printing

Printer Interfaces	Centronics parallel RS-232-C HP-IB
Printers Supported	Printers which support the HP Printer Control Language (PCL). Recommended: HP DeskJet 680C HP LaserJet 4L Epson FX80, LX80, and MX80 printers with Centronics parallel or RS-232-C interfaces are supported in the Epson 8-bit graphics mode.
Keyboard	Any PS-2 style keyboard with a DIN connector is supported. The HP E2427B keyboard is available which includes an overlay for special function keys. See "Accessories available" below.



HP 16500C rear panel

Intermodule Bus (IMB)

Run Control	Oscilloscope, timing analyzers, state analyzers, and pattern generator modules can be armed by Group Run. Modules can be armed concurrently (independently) or can be armed in series. Each module can arm one or more other modules. HP 16554A, 16555A, 16555D, 16556A, and 16556D modules can trigger each other in an "OR" configuration.
Mixed Display Modes	Any timing or oscilloscope waveform displays from different modules armed together on a group run can be mixed.
	Time-correlated state listings can be included with waveforms in the state/timing mixed mode display, provided that time tags are turned on in the state analyzer and the modules are combined in a group run.
Time Interval Accuracy Between Modules	The sum of the channel-to-channel time-interval accuracy of each module used in the measurement for a deskewed measurement.
Time Correlation Resolution	2 ns

Port In/Out

Connectors	BNC
Port In	
Levels	TTL, ECL, or user-defined
Input Resistance	4 KΩ
Input Voltage	–6 V at –1.5 mA to +6 V at 1.6 mA
Port Out	
Levels	3-V TTL compatible into 50 Ω
Functions (user selectable)	Latched until next RUN Latched until STOP Pulsed, width from 40 to 80 ns Static open-collector

Target Control Port

Number of Signals	8
Levels	3-V TTL compatible
Connector	2 x 5 (2 rows; 5 pins/row), 0.1-inch centers
Functions	All bits can be individually set to open collector. Activity indicators are provided on all bits. Up to eight vectors can be programmed in memory. Vectors can be sequenced manually. Outputs can be individually pulsed, individually set to high, low, or high-impedance, or stepped to the next step of a pre-stored sequence.

Operating Environment

Temperature	
Instrument	0° to 50 °C (32° to 122 °F)
Disk media	10° to 40 °C (50° to 104 °F)
Probes and cables	0° to 65 °C (32° to 149 °F)
Altitude	To 3000 m (10,000 ft)
Humidity	8% to 80% relative humidity at 40° C (104° F)
Vibration, Operating	Random vibration 5 to 500 Hz, 10 minutes per axis, 0.3 g RMS
Vibration, Non-operating	Random vibration 5 to 500 Hz, 10 minutes per axis, 2.41 g RMS Swept sine resonant search, 5 to 500 Hz, 0.75 g (0-peak), 5 minute dwell at 4 resonances per axis

Power

115/230 V, 48 to 66 Hz, 475 W max

Weight

HP 16500C (max. net)	18.1 kg (40 lb.) + [0.7 kg (1.6 lb.) x number of modules]
HP 16500C (max. shipping)	25.9 kg (57 lb.) + [3.6 kg (8 lb.) x number of modules]
HP 16501A (max. net)	13.6 kg (30 lb.) + [0.7 kg (1.6 lb.) x number of modules]
HP 16501A (max. shipping)	21.3 kg (47 lb.) + [3.6 kg (8 lb.) x number of modules]

Dimensions

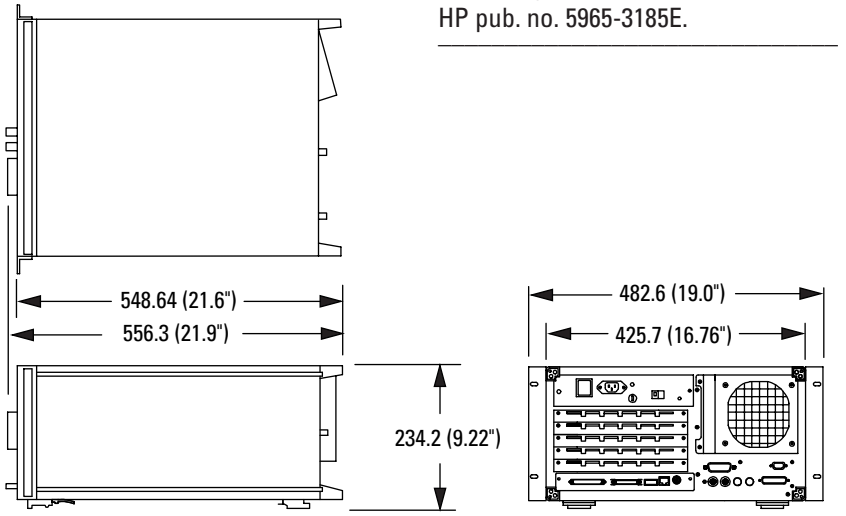
222.2 mm (8.75 in) x 425.7 mm (16.76 in) x 548.6 mm (21.6 in) including rear feet, but not bottom feet.

Accessories Supplied

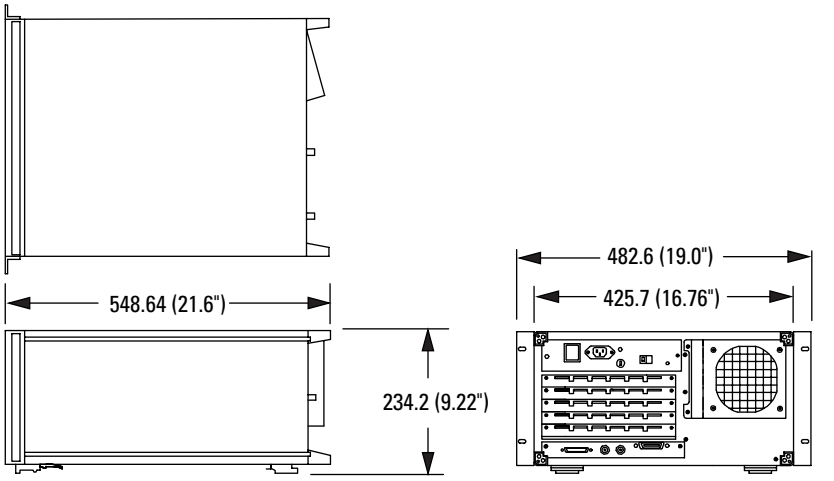
One HP A2839B, 3-button DIN mouse
Ten-conductor flying-lead cable for target control port

Accessories Available

HP E2427B, PC-style keyboard with overlay



HP 16500C



HP 16501A

Warranty

HP hardware products are warranted against defects in materials and workmanship for a period of one year from date of shipment. Some newly manufactured HP products may contain remanufactured parts, which are equivalent to new in performance. If you send notice of defects during the warranty period, HP will either repair or replace hardware products that prove defective.

Configuration

For configuration information, refer to HP pub. no. 5965-3185E.

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Technical data is subject to change

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