

B-size VME/VXI Portable Mainframes HP E1300A, HP E1301A

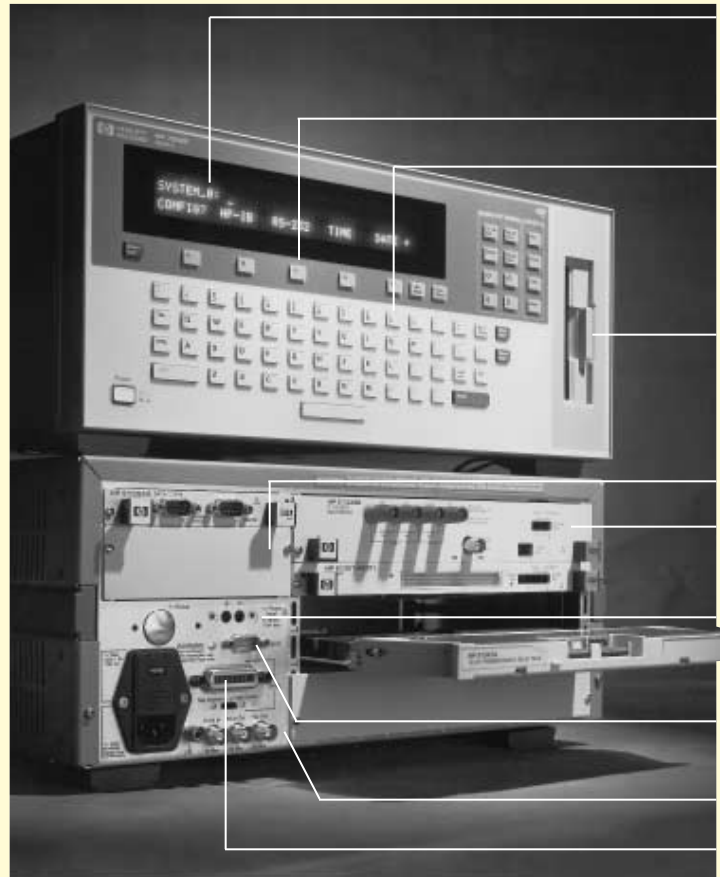
- Lowest cost, small size
- Built-in high-performance command module*
- HP-IB and Resource Manager capabilities*
- SCPI for easy programming*
- Optional IBASIC for standalone operation*
- Optional DC power for remote applications



HP E1300A: 9 B-size slots (2 internal), 3 A-size Slots, VME/VXI, P1 Connector

*Refer to pages 3.07/08 for command module details.

HP Foundations Supported	1-5, 13-16
VXI plug&play Frameworks Supported	N/A



HP E1301A front and rear panels shown

- Two-line, vacuum fluorescent display for menus, measurement results, data monitoring over HP-IB, and instrument status
- Menu Keys for common measurements and easy debug
- Keyboard for entering commands for debug and wiring verification
- SCPI programming language
- Optional HP IBASIC programming language
- Optional 3.5-in floppy disk
- 3 A-size slots for extra RS-232/RS-422 (requires IBASIC)
- Two internal slots for multimeter installation, seven external B-size slots for instrument and switching modules
- Optional DC power connector for portable applications or as a UPS (uninterruptible power supply); battery and charger are user supplied
- Built-in RS-232 for connecting an external terminal, printer, or device
- Trigger Input and Pacer Output BNCs
- HP-IB (IEEE-488) connector for communication with an external computer, printer, or instrument

Low-Cost VME/VXI

The HP E1300A/E1301A features a built-in command module (functionally identical to the HP E1306A Command Module) with built-in HP-IB interface. Standalone operation is easily configured with DC power and IBASIC controller options.

HP E1301A

The HP E1301A is identical to the HP E1300A in function but features a front panel and keyboard for manual control and troubleshooting without the use of HP-IB, making this an ideal mainframe for remote applications.

Built-in HP-IB Command Module

See Chapter 3, *Controllers and Storage*, for **HP E1300A/E1301A built-in command module specifications**. Refer to Chapter 1 for recommended configurations for systems using the HP E1300A/E1301A mainframe.

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Optional Internal Disk Drives

If you're using HP IBASIC, you can also add a 3.5-in floppy drive (Opt 005). This ruggedized drive provides storage for programs and data as well as for autostart routines. The disk drive can be ordered with the mainframe or field-installed later. The 3.5-in floppy drive supports 256 KB, 720 KB, and 1.4 MB formatted capacities. Internal RAM volume, optional internal floppy drive, and external SS/80 drives are supported.

GENERAL CHARACTERISTICS

Air Flow and Power Supply Serviceability

- Power Input and cooling air intake through the right side
- Cooling air exhaust through the left side

Backplane

- 7 external slots
- 2 internal slots (reserved for HP E1326B internal DMM)
- 3 external A-size slots
- VME/VXI P1 only backplane

Solid state automatic daisy-chain provides jumpering for the VMEbus grant and interrupt acknowledge lines, eliminating the need for hand selection of switch settings.

MECHANICAL SPECIFICATIONS

	mm	inches
Height without bottom feet	177	6.97
Height with bottom feet	189	7.44
Width	426	16.75
Depth	510	20.1
Depth with terminal blocks	569	22.38

Weight:

- HP E1300A:** 7.4 kg/ 16 lbs
- HP E1301A:** 7.8 kg/ 17 lbs

POWER SPECIFICATIONS

Power Output

The power supply generates backplane logic signals ACFAIL* and SYSRESET* in full compliance with the VXI Specification, Revision 1.4.

DC Output Voltage	Pk Current I _{MP}
+5 V	12.2 A
+12 V	4.6 A
-12 V	0.9 A

120 W maximum at 40 °C

Power Supply Protection

All outputs are protected from over-temperature, over-voltage, over-current, and short-to-ground

Power Input

Input voltage: 115 Vac to 230 Vac

Input frequency: 50 Hz to 400 Hz

Optional DC Operation

Voltage: 11-30 Vdc

Current: 20 A maximum, breaker protected (also protected against over voltage and reverse polarity)

Transparent switch to DC: <5 ms

Cooling

Temperature rise: 10 °C (through the module for a 15 W module with typical density)



Note: See page 15.02 for more information on cooling specifications.

ENVIRONMENTAL and REGULATORY

Acoustic Noise

Less than 48 dBA sound pressure at bystander position (measured 1 m in front of product per DIN 45635T.1)



Note: See Appendix A-3 for additional EMC compliance specifications.

COMMAND MODULE SPECIFICATIONS



See Chapter 3, *Controllers and Storage*, for descriptions and specifications for the the HP E1300A/E1301A B-size mainframes with built-in HP-IB command module (page 3.08).



Rack-mounting Details

Configuration Checklist

Find the column (A, B, or C) that contains the desired rack-mounting components, then follow the column down for ordering information.

Recommended Configurations			
Desired Rack-mounting Components	A	B	C
Rack-mount		*	*
Handles	*		*
Rails and Flanges		*	*

You Need to Order

		For reorders use part numbers:
Option 907 Handle Kit	X	5062-3900
Option 908 Rack-mount Rails/Flanges		X E1300-80908
Option 909 Rack-mount Rails/Flanges/Handles		X E1300-80909

Ordering Information

B-Size VME/VXI Mainframe (plain front panel).....HP E1300A

(Includes built-in command module⁽¹⁾, HP-IB, RS-232, and HP VIC)

B-Size VME/VXI Mainframe

(w/ front panel keyboard/display).....HP E1301A

(Includes built-in command module⁽¹⁾, HP-IB, RS-232, and HP VIC)

Mainframe Options

- Module installation using standard address settings.....Opt 500
 - Warranty conversion to 1-year on-site.....Opt W01
 - Service ManualOpt 0B3
 - MIL-STD-45662A Calibration Certification with calibration data.....Opt 1BP
 - HP E1326B 5.5-digit Multimeter installed internallyOpt 009
- Note: Banana Plug Adapter included with Opt 009.*
- External DC Power Operation InstalledOpt 008
 - Banana Plug Adapter for internal DVME1326-80005

System (built-in command module) Options—select one⁽²⁾

- IBASIC Controller with 512 KB Nonvolatile Memory⁽³⁾.....Opt 020
- IBASIC Controller with 1 MB Nonvolatile Memory⁽³⁾.....Opt 021
- IBASIC Controller with 2 MB Nonvolatile Memory⁽³⁾.....Opt 022
- 512 KB Nonvolatile Memory.....Opt 010
- 1 MB Nonvolatile Memory.....Opt 011
- 2 MB Nonvolatile Memory.....Opt 012

Disk Storage Option Installed (requires IBASIC)

- 3.5-in Floppy Disk DriveOpt 005

⁽¹⁾ HP E1306A Command Module descriptions and specifications are found in Chapter 3, Controllers and Mass Storage.

⁽²⁾ Order Opt 012 if configuration includes an HP E1313A.

⁽³⁾ IBASIC does not support the HP E1312A or any message-based module.

Note: See the Rack-mounting Details Configuration Checklist above for rack-mount specifications and dimensions.

Rack-mount (ordering guide)

- Front Handle KitOpt 907
- Rack-mount Flanges and Rails*.....Opt 908
- Rack-mount Handles, Flanges, and Rails*Opt 909

**Note: For HP cabinets, includes hardware.*

Filler Panels

Note: Two 1-slot, B-size panels and one each of the other panels are shipped with each mainframe purchase.

- 1-slot B-size Filler Panel.....E1300-04103
- 2-slot B-size Filler Panel.....E1300-04104
- 3-slot B-size Filler Panel.....E1300-04105
- 1-slot A-size Filler Panel.....E1300-04106
- 2-slot A-size Filler Panel.....E1300-04107

Field Installation Kits

Part numbers below are for retrofit orders.

	HP Part #
IBASIC (requires 512 KB memory minimum).....	E1300-80001
512 KB nonvolatile memory for HP 75000 Series B Mainframes (1 MB maximum per mainframe).....	E1300-80002
1 MB nonvolatile memory for HP 75000 Series B Mainframes (2 MB maximum per mainframe).....	E1300-80003
Disk Controller (only one required per mainframe).....	E1300-80011
3.5-in Floppy Disk Drive (requires IBASIC and Disk Controller).....	E1300-80005
External DC Power Operation.....	E1300-80008
Internal Installation Kit for HP E1326B 5.5-digit Multimeter.....	E1326-80004
Banana Plug Adapter for internal DVM.....	E1326-80005