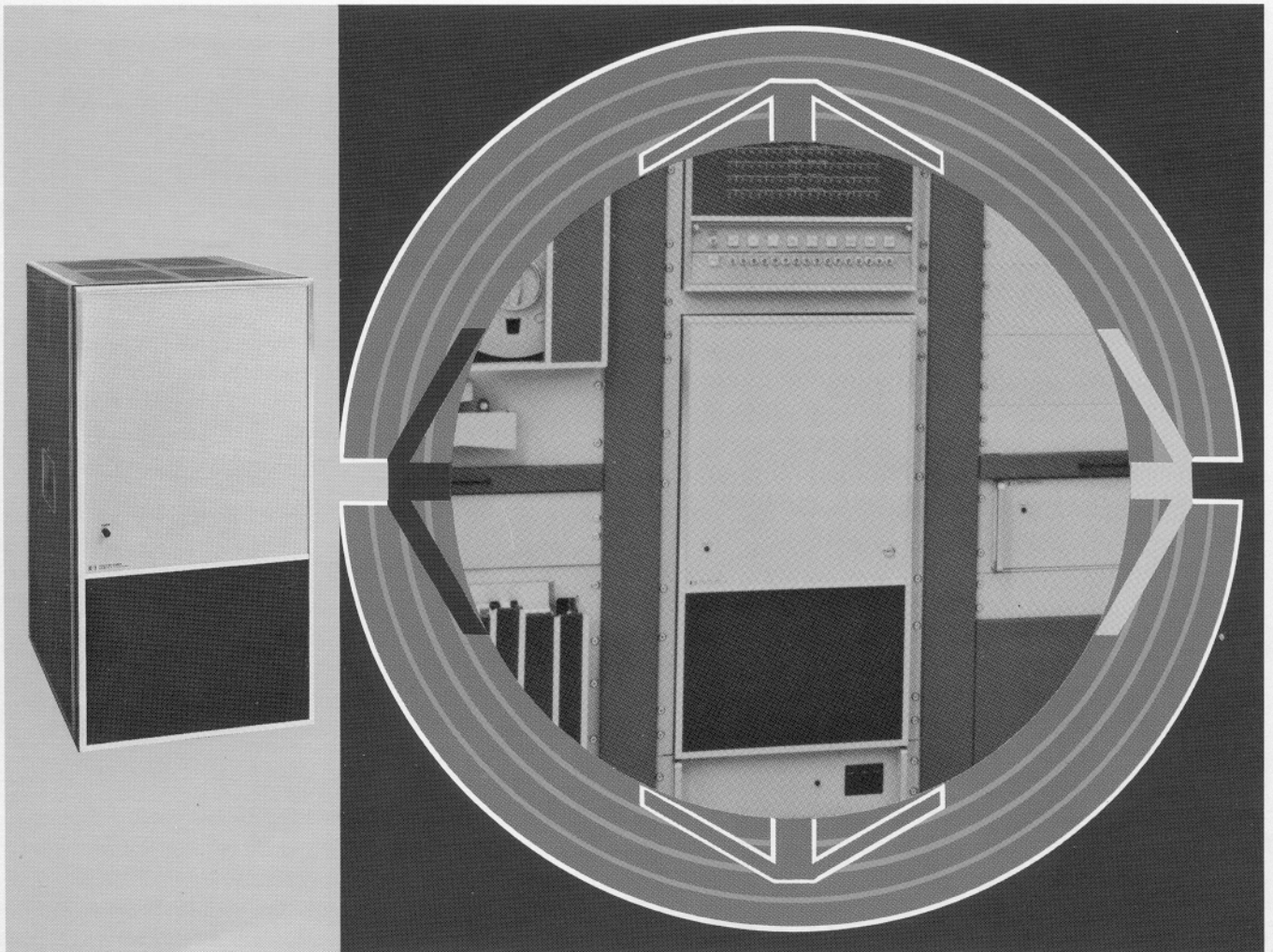


INPUT/OUTPUT AND MEMORY EXTENDER

EXPANDED I/O AND MEMORY FOR THE HP 2116B



FEATURES

- **I/O EXPANSION**

Increases the number of 2116B I/O channels to 48

- **MEMORY EXPANSION**

Adds either 8K or 16K of memory to the 16K in the 2116B

- **EASY PROGRAMMING**

Requires no special programming techniques

- **NO HARDWARE MODIFICATION**

Accomplished by card insertion and cable connection

- **OFF-THE-SHELF INTERFACE**

Accepts HP standard I/O interface kits

- **INDEPENDENT POWER SUPPLY**

Provides power for the added interfaces

PROGRAMMING

Programming your computer with the Extender requires no special techniques. Indirect addressing permits the computer to reference up to 32K of memory; hence, the maximum expansion provided by the Extender offers no programming problems because the Extender memory can be addressed in the same manner as mainframe memory. Similarly, the select code portion of I/O instructions is more than adequate to handle the 32 additional I/O channels. The one exception is that channels in the Extender cannot use Direct Memory Access. The added I/O channels occupy the next sequential block of octal select codes (or interrupt addresses) above 27, the highest numbered channel in the 2116B; hence, the Extender channels will be numbered 30 through 67.

ADDING AN I/O AND MEMORY EXTENDER TO YOUR HP 2116B

The HP 2150B Extender provides the capability for expansion of the 16K memory and 16 I/O channels available to your HP 2116B computer. Several models of the Extender exist because of the options available which may be ordered in any of the following combinations:

| Option(s) | Adds |
|------------|------------------------------------|
| 01 | 32 I/O channels |
| 01, 02 | 32 I/O channels plus 8K of memory |
| 01, 02, 03 | 32 I/O channels plus 16K of memory |
| 02 | 8K of memory |
| 02, 03 | 16K of memory |

Only card insertion and cable connection are necessary to add the Extender to your computer. Furthermore, the basic Extender readily accepts the various options without any special mechanical or electrical modifications. HP delivers the Extender with the ordered option(s) installed. However, any option may be added at a later date with an HP accessory kit.

SPECIFICATIONS

VENTILATION

Intakes on sides and back at bottom; exhaust at top (airflow, 600 cubic feet per minute)

INSTALLATION

May be bench mounted or installed in a standard 19-inch rack (adapters furnished); recommended clearances: 5 inches (minimum) at rear, 3 inches (minimum) at top

DIMENSION

Width: 16.75 inches (425,5mm)
Height (panel): 31.5 inches (782,4mm)
Depth (behind panel): 19.37 inches (491,9mm)

WEIGHT

Net: 230 lbs. (104kg) }
Shipping: 330 lbs. (148kg) } No options installed

POWER

Source: 115V \pm 10%, 50 to 60 Hz
230V \pm 10%, 50 to 60 Hz (option 15)
Consumption: 1600W max., depending on number of I/O interfaces
Supply Currents: 6A (+12V); 6A (-12V); 22.5A (-2V); 22.5A (4.5V) plus current drawn from -2V supply, up to a maximum of 45A

ENVIRONMENTAL CONDITIONS

Temperature: 0° to 55°C (32° to 131°F)
Relative Humidity: to 95% at 40°C (104°F)

OPTIONS

- 01: Increases the number of I/O channels from 16 to 48
- 02: Expands memory from 16 to 24K
- 03: Expands memory from 24 to 32K (requires option 02)

EQUIPMENT SUPPLIED

HP 2150B EXTENDER

which includes:

- Power Supply Assembly, HP Part No. 02150-6008
- Overvoltage Protection Assembly, HP Part No. 02150-6284
- Power Fail Card, HP Part No. 02150-6022
- Interconnecting Cable, HP Part No. 02150-6018
- Ground Cable, HP Part No. 02150-6019

OPTION 01 (includes I/O Extender Accessory Kit 12612A when field installed) which consists of:

- I/O 1 Extender Driver, HP Part No. 02116-6182
- I/O 2 Extender Driver, HP Part No. 02116-6183
- I/O Extender Driver X1, HP Part No. 02150-6001
- I/O Extender Driver X2, HP Part No. 02150-6002
- Two I/O Extension Cables, HP Part No. 02150-6003
- Two Resistance Load Cards, HP Part No. 02116-6047

OPTION 02 (includes 8K Memory Extender Accessory Kit 12613A when field installed) which consists of:

- Core Stack Assembly, HP Part No. 02116-6288
- Two Sense Amplifier Cards, HP Part No. 02116-6298
- Two Memory Extend Cards, (2116B) HP Part No. 02116-6299
- Two Memory Extension Cables, HP Part No. 02150-6004
- Two Memory Extend Cards (2150B), HP Part No. 02150-6023
- Two Driver Switch Cards, HP Part No. 02150-6024
- Two Inhibit Driver Cards, HP Part No. 02150-6025

OPTION 03 (includes 16K Memory Extender Accessory Kit 12614A when field installed) which consists of:

- Core Stack Assembly, HP Part No. 02116-6288
- Two Sense Amplifier Cards, HP Part No. 02116-6298
- Two Driver Switch Cards, HP Part No. 02150-6024
- Two Inhibit Driver Cards, HP Part No. 02150-6025

A SEPARATE SHEET, AVAILABLE FROM ANY HEWLETT-PACKARD FIELD SALES OFFICE, PROVIDES PRICE AND ORDERING INFORMATION FOR HP COMPUTER I/O OPTIONS AND INTERFACE KITS. WHEN ORDERING THE 2150B EXTENDER OR ANY OPTION(S), BE SURE TO SPECIFY THE COMPUTER SERIAL NUMBER.