



# Technical Information

*For Macintosh Plus PowerBook 145*

## Specifications

### Processor

- 68030  
25 MHz clock frequency

### Memory

- 4 MB pseudostatic RAM (2 MB on logic board, 2 MB on a memory expansion card); expandable to 8 MB  
1 MB ROM

### Disk drives

- Internal 40 or 80 MB hard disk drive  
Built-in 1.4 MB floppy disk drive

### Video display

- 640 x 400 backlit Supertwist (FSTN), monochrome

### Main battery

- Rechargeable nickel cadmium battery  
2–3 hours of operation

### Backup battery

- 30 mAh rechargeable lithium battery for clock chip

### Sound generator

- 4-voice sound with 8-bit digital-analog conversion  
recording at 11 kHz or 22 kHz sample rate

### Interfaces

- Apple Desktop Bus (ADB) port for keyboard, mouse, and other input devices using a low-speed, synchronous serial bus
- Two serial ports for printers, modems, and other serial devices (RS-422)
- SCSI port for hard disk drives, scanners, printers, and other devices (HDI-30 connector)
- Sound output port for external audio amplifier
- Sound input port for monaural sound input

## Power adapter

- Input: AC100–240 V, 50/60 Hz
- Output: DC 7.5 V, 2.0 A
- ❖ *Note:* The PowerBook 145 can be used at any input voltage within the range above, with no effect on performance. ❖

## Clock/calendar

- CMOS custom chip with long-life lithium battery

## Keyboard

- 3.0 mm travel keyboard  
18 mm vertical pitch, 18.63 mm horizontal pitch

## Trackball

- 30 mm diameter

## Modem

- 2400-bps modem with fax send capability
- Supports MNP error correction and data compression classes 4 and 5, as well as CCITT v.32 and v.32bis

## Weight

- 3.1 kg (6.8 lb.)

## Dimensions

- 286 mm x 236 mm x 57 mm (11.25" x 9.3" x 2.25")

## Apple Desktop Bus power requirements

- Maximum current draw for all ADB devices is 200 mA
- ❖ *Note* The maximum number of ADB devices recommended in a daisy chain connected to the ADB port is three. ❖

## RAM configurations

- The 4 MB configuration of this model includes a 2 MB card that must be removed to expand memory. RAM chips must be rated at 100 ns access time or faster.
- ▲ **Warning:** Do not attempt to install additional RAM yourself. Doing so will void the warranty on your computer. See your authorized Apple dealer or service provider. ▲

## Microphone/Sound

- The external microphone is an omnidirectional electret type that is powered by the computer. Microphone output voltage is 4 millivolts (mV) peak to peak at normal speaking volume.
- ❖ *Note:* You can also use adapters to input sound from audio equipment with line level outputs, but the line level signals must be attenuated before reaching the computer's sound input port. An attenuation of 500:1 is recommended when inputting line level signals. Appropriate attenuation cables and adapters are available from most electronics stores. ❖

## Environment

### Operating temperature

- 10°C to 40°C (50°F to 104°F)

### Storage temperature

- -25°C to 60°C (-13°F to 140°F)

### Relative humidity

- 20% to 80% noncondensing

### Altitude

- Operating: 3048 m (10,000 ft.) maximum
- Shipping (non-operating): 4572 m (15,000 ft.) maximum

## Options and accessories

The following are available as options and accessories for your PowerBook computer.

Item	Part number
Macintosh PowerBook 2 MB Memory Expansion Kit	M1032
Macintosh PowerBook 4 MB Memory Expansion Kit	M1033
Macintosh PowerBook Battery Recharger	M1027
Macintosh PowerBook Rechargeable Battery	M5545
Macintosh PowerBook AC Adapter	M4660
Macintosh PowerBook Fax/Data Modem (for US, Canada, and Japan)	M0970
Macintosh PowerBook Fax/Data Modem (for Europe, Australia, and some South American countries)	M0980
Apple HDI-30 SCSI Disk Adapter	M2539
Apple HDI-30 SCSI System Cable	M2538

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