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# Technical Information

For Macintosh PowerBook 165c

# **Specifications**

#### Processor

68030
 33 MHz clock frequency with FPU

#### Memory

• 4 MB pseudostatic RAM; expandable to 14 MB 1 MB ROM

#### Disk drives

 Internal 80 or 120 MB hard disk drive Built-in 1.4 MB floppy disk drive

#### Video display

• 640 x 400 backlit Supertwist (FSTN), 256 colors

#### Main battery

 Rechargeable nickel cadmium battery 1.5–2 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
- Video port (micro DB-15) for 8-bit/256-color video output to most Apple monitors, VGA monitors (640 x

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- Sound output port for external audio amplifier
- Sound input port for monaural sound input
- Video port (micro DB-15) for 8-bit/256-color video output to most Apple monitors, VGA monitors (640 x 480), and SVGA monitors (600 x 800); includes 512K VRAM to support external monitor, and cable with

standard DB-15 connector

#### Power adapter

- Input: AC100–240 V, 50/60 Hz
- Output: DC 7.5 V, 3.0 A
- *Note:* The PowerBook 165c 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

## Weight

■ 3.18 kg (7.0 lb.)

### Dimensions

■ 286 mm x 236 mm x 58.23mm (11.26" x 9.29" x 2.29")

# 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

All models come with 4 MB of RAM. Additional RAM can be installed on a memory expansion card. Apple recommends that installation of additional memory be done by an authorized Apple dealer or service provider.

For best results, RAM chips must be rated at 85 ns access time or faster.

### Microphone/Sound

- The internal microphone is an omnidirectional electret type. Microphone output voltage is 4 millivolts (mV) peak to peak at normal speaking volume. An external microphone can also be used with this computer.
- 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.

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