

Product Details

Apple Displays

Apple's all-digital flat-panel displays are available in three sizes to meet the needs of professional Macintosh users.

	20-inch Apple Cinema Display	23-inch Apple Cinema HD Display	30-inch Apple Cinema HD Display
Order number	M9177LL/A	M9178LL/A	M9179LL/A
Screen size and type	20-inch (viewable) active-matrix LCD	23-inch (viewable) active-matrix LCD	30-inch (29.7-inch viewable) active-matrix LCD
Maximum resolution	1680 by 1050 pixels	1920 by 1200 pixels	2560 by 1600 pixels
Viewing angle	170° horizontal; 170° vertical	170° horizontal; 170° vertical	170° horizontal; 170° vertical
Color support	16.7 million colors	16.7 million colors	16.7 million colors
Brightness	250 cd/m ²	270 cd/m ²	270 cd/m ²
Contrast ratio	400:1	400:1	400:1
Input/Output ports	DVI connector, two USB 2.0 ports, two FireWire 400 ports	DVI connector, two USB 2.0 ports, two FireWire 400 ports	DVI connector, two USB 2.0 ports, two FireWire 400 ports
Agency approvals	ENERGY STAR, TCO '03	ENERGY STAR, TCO '03	ENERGY STAR, TCO '03
Optional accessories	Cinema Display VESA Mount Adapter—compatible with VESA FDMI (MIS-D, 100, C) compliant mounting solutions; ADC to DVI adapter		

System Requirements

The 20-inch Apple Cinema Display and 23-inch Apple Cinema HD Display require one of the following:

- Power Mac G4 or G5 with Mac OS X v10.2.8 or later and NVIDIA graphics card or ATI Radeon 7500 or better graphics card
- PowerBook G4 with Mac OS X v10.2.8 or later and DVI port
- PC with full-bandwidth single-link DVI port and DDC support

The 30-inch Apple Cinema HD Display requires one of the following:

- Power Mac G5 with Mac OS X v10.3.4 or later and NVIDIA GeForce 6800 Ultra DDL graphics card (available as a build-to-order option for Power Mac G5 purchasers and as an upgrade kit for existing Power Mac G5 owners; note that the card occupies the AGP slot and adjacent PCI slot)
- PC with full-bandwidth dual-link DVI port and DDC support

Dual display support

The Power Mac G5 with the NVIDIA GeForce 6800 Ultra DDL graphics card supports two Apple displays (including two 30-inch displays). Other Power Mac G4 and G5 configurations support a second 20- or 23-inch Apple display via an Apple ADC to DVI Adapter (sold separately).

Extended Service and Support

Purchase the AppleCare Protection Plan to extend your service and support to up to three full years. The plan provides support for your Mac, the Mac OS, and many Apple consumer applications, so just one phone call can help resolve most issues. Power Mac and PowerBook customers can also enroll one display for coverage, provided that the display is purchased at the same time as the covered computer. For more information, visit www.apple.com/support/products or call 800-823-2775.

Technical Specifications

Following are the specifications for the 20-inch Apple Cinema Display, the 23-inch Apple Cinema HD Display, and the 30-inch Apple Cinema HD Display.

Screen size

- 20-inch Apple Cinema Display: 20 inches (diagonal viewable)
- 23-inch Apple Cinema HD Display: 23 inches (diagonal viewable)
- 30-inch Apple Cinema HD Display: 30 inches (29.7 inches diagonal viewable)

Screen type

- Thin film transistor (TFT) active-matrix liquid crystal display

Resolutions

20-inch Apple Cinema Display

- 1680 by 1050 pixels (optimum resolution)
- 1280 by 800 pixels
- 1024 by 640 pixels

23-inch Apple Cinema HD Display

- 1920 by 1200 pixels (optimum resolution)
- 1280 by 800 pixels
- 1024 by 640 pixels

30-inch Apple Cinema HD Display

- 2560 by 1600 pixels (optimum resolution)
- 2048 by 1280 pixels
- 1920 by 1200 pixels
- 1280 by 800 pixels
- 1024 by 640 pixels

Display colors (maximum)

- 16.7 million

Viewing angle (typical)

- 170° horizontal; 170° vertical

Brightness (typical)

- 20-inch Apple Cinema Display: 250 cd/m²
- 23-inch Apple Cinema HD Display: 270 cd/m²
- 30-inch Apple Cinema HD Display: 270 cd/m²

Contrast ratio (typical)

- 400:1

Response time (typical)

- 16 ms

Pixel pitch

- 20-inch Apple Cinema Display: 0.258 mm
- 23-inch Apple Cinema HD Display: 0.258 mm
- 30-inch Apple Cinema HD Display: 0.250 mm

Screen treatment

- Antiglare hardcoat

User controls (hardware and software)

- Display power
- System sleep and wake
- Brightness
- Monitor tilt

Cable connectors

- DVI (Digital Visual Interface)
- FireWire 400
- USB 2.0
- DC power (24.5V)

Ports

- Two-port, self-powered USB 2.0 hub
- Two FireWire 400 ports
- Kensington security port

VESA mount

- Requires Cinema Display VESA Mount Adapter (M9649G/A, sold separately)
- Compatible with VESA FDMI (MIS-D, 100, C) compliant mounting solutions

Electrical requirements

- Input voltage: 100–240 VAC; 50–60Hz
- Maximum power when operating
 - 20-inch Apple Cinema Display: 65W
 - 23-inch Apple Cinema HD Display: 90W
 - 30-inch Apple Cinema HD Display: 150W
- Energy saver mode: 3W or less

Environmental requirements

- Operating temperature: 50° to 95° F (10° to 35° C)
- Storage temperature: –40° to 116° F (–40° to 47° C)
- Operating humidity: 20% to 80% noncondensing
- Maximum operating altitude: 10,000 feet

Agency approvals

- FCC Part 15 Class B
- EN55022 Class B
- EN55024
- VCCI Class B
- AS/NZS 3548 Class B
- CNS 13438 Class B
- ICES-003 Class B
- ISO 13406 Part 2
- MPR II
- IEC 60950
- UL 60950
- CSA 60950
- EN60950
- ENERGY STAR
- TCO '03

Size and weight

20-inch Apple Cinema Display

- Height: 16.1 inches (41 cm)
- Width: 18.5 inches (47.1 cm)
- Depth: 6.8 inches (17.4 cm)
- Weight: 14.5 pounds (6.6 kg)

23-inch Apple Cinema HD Display

- Height: 17.7 inches (45 cm)
- Width: 21.1 inches (53.6 cm)
- Depth: 7.3 inches (18.7 cm)
- Weight: 15.5 pounds (7.03 kg)

30-inch Apple Cinema HD Display

- Height: 21.3 inches (54.3 cm)
- Width: 27.2 inches (68.8 cm)
- Depth: 8.46 inches (21.5 cm)
- Weight: 27.5 pounds (12.5 kg)

For More Information

For more information about Apple's family of all-digital flat-panel displays, visit www.apple.com/displays.

¹See System Requirements on page 22 for details. ²The NVIDIA GeForce 6800 Ultra DDL graphics card is available for Power Mac G5 systems as a build-to-order option at the time of purchase. An upgrade kit is available for existing Power Mac G5 owners.