



Overview

Providing 20, 40, 80, or 160 megabytes of storage capacity, Apple® External Hard Disks are ideally suited to meet the growing needs of business, education, professional, and technical users who demand fast, convenient, and reliable access to their applications and data files.

Besides providing vastly more storage capacity than a floppy disk, Apple Hard Disks access and transfer data up to six times faster than floppy disk drives.

Macintosh® computers equipped with a SCSI port, as well as Apple IIe and Apple IIgs® computers equipped with an Apple II SCSI Interface Card, can support external hard disk products.

Features

- ▶ 20, 40, 80, or 160 megabytes of storage
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- ▶ Fast data access:
160SC—18 milliseconds average seek
80SC—20 milliseconds average seek
40SC—30 milliseconds average seek
20SC—68 milliseconds average seek
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- ▶ Industry-standard Small Computer System Interface (SCSI)

Benefits

- ▶ Provides for fast, convenient access to large data files and multiple applications without swapping floppy disks.
- ▶ Supports creation of high-end solutions such as AppleShare® file servers and A/UX® systems.
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- ▶ Accesses data significantly faster than floppy disk drives.
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- ▶ Provides fast data transmission (up to 1.25 megabytes per second).
- ▶ Allows you to expand your system with additional SCSI peripherals.
- ▶ Provides connection to the Apple Tape Backup 40SC for file backup and restoration.
- ▶ Assures a growth path.

Apple Hard Disk 20SC

System Requirements

To use an Apple Hard Disk 20SC with a Macintosh personal computer, you must have:

- ▶ SCSI port

To use an Apple Hard Disk 20SC with an Apple IIe or Apple IIgs personal computer, you must have:

- ▶ Apple II SCSI Interface Card

Product Details

▶ **SCSI expansion**
SCSI expansion lets you connect as many as three additional SCSI

devices to an Apple IIe or Apple IIgs, or as many as six to a Macintosh.

Technical Specifications

Capacity

Data capacity:	20 megabytes (formatted)
Data surfaces:	4
Heads/Surface:	1
Block size:	512 bytes
Total disk blocks:	41,060
Blocks/Track:	17

Characteristics

Average seek time:	68 milliseconds
Rotational speed:	3,600 rpm
Startup time:	20 seconds
Spin-down time:	20 seconds

Interface

Connects directly to the Macintosh Plus, Macintosh SE, Macintosh SE/30, Macintosh II, Macintosh IICX, and Macintosh IIX via the external SCSI DB-25 connector.	Connects to the Apple IIe or Apple IIgs via the expansion port, using the Apple II SCSI Interface Card.
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Electrical requirements

Line voltage:	85 to 270 volts AC
Frequency:	47 to 64 hertz
Maximum power:	30 watts

Environmental requirements

Operating temperature:	50° to 104° F (10° to 40° C)
Storage temperature:	32° to 122° F (0° to 50° C)
Relative humidity:	20% to 80% noncondensing
Operating altitude:	0 to 10,000 ft. (0 to 3,048 m)
Shipping altitude:	-1,000 to 40,000 ft. (-305 to 12,192 m)

Size and weight

Height:	3.1 in. (7.8 cm)	Depth:	10.5 in. (26.6 cm)
Width:	9.7 in. (24.6 cm)	Weight:	7.4 lbs. (3.35 kg)

Ordering Information

Apple Hard Disk 20SC
Order No. M2620/A

With your order, you'll receive:

- ▶ Apple Hard Disk 20SC
- ▶ Owner's guide
- ▶ Setup disk
- ▶ Power cord
- ▶ Apple SCSI System Cable
- ▶ Apple SCSI Cable Terminator
- ▶ Limited warranty statement

Apple II SCSI Interface Card
Order No. A2B2087

Apple Hard Disk 40SC

System Requirements

See the Apple Hard Disk 20SC for the Apple Hard Disk 40SC system requirements.

Product Details

► **SCSI expansion** devices to an Apple IIe or Apple IIGS, or as many as six to a Macintosh.
SCSI expansion lets you connect as many as three additional SCSI

Technical Specifications

Capacity	Data capacity:	40 megabytes (formatted)
	Data surfaces:	3 or 4
	Heads/Surface:	1
	Block size:	512 bytes
	Total disk blocks:	82,020
	Blocks/Track:	28, 33, or 35

Characteristics	Average seek time:	30 milliseconds
	Rotational speed:	3,600 or 3,662 rpm
	Startup time:	20 seconds
	Spin-down time:	20 seconds

Interface	Connects directly to the Macintosh Plus, Macintosh SE, Macintosh SE/30, Macintosh II, Macintosh IICX, and Macintosh IIX via the external SCSI DB-25 connector.	Connects to the Apple IIe or Apple IIGS via the expansion port, using the Apple II SCSI Interface Card.
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Electrical requirements	Line voltage:	85 to 270 volts AC
	Frequency:	47 to 64 hertz
	Maximum power:	60 watts

Environmental requirements	Operating temperature:	50° to 104° F (10° to 40° C)
	Storage temperature:	32° to 122° F (0° to 50° C)
	Relative humidity:	20% to 80% noncondensing
	Operating altitude:	0 to 10,000 ft. (0 to 3,048 m)
	Shipping altitude:	-1,000 to 40,000 ft. (-305 to 12,192 m)

Size and weight	Height: 3.1 in. (7.8 cm)	Depth: 10.5 in. (26.6 cm)
	Width: 9.7 in. (24.6 cm)	Weight: 7.5 lbs. (3.4 kg)

Ordering Information

Apple Hard Disk 40SC
Order No. M2644/A

With your order, you'll receive:

- Apple Hard Disk 40SC
- Owner's guide
- Setup disk
- Power cord
- Apple SCSI System Cable
- Apple SCSI Cable Terminator
- Limited warranty statement

Apple II SCSI Interface Card
Order No. A2B2087

Apple Hard Disk 80SC

System Requirements

See the Apple Hard Disk 20SC for the Apple Hard Disk 80SC system requirements.

Product Details

► **SCSI expansion** devices to an Apple IIe or Apple IIGS, or as many as six to a Macintosh. SCSI expansion lets you connect as many as three additional SCSI

Technical Specifications

Capacity	Data capacity:	80 megabytes (formatted)
	Data surfaces:	5
	Heads/Surface:	1
	Block size:	512 bytes
	Total disk blocks:	163,940
	Blocks/Track:	28 or 35

Characteristics	Average seek time:	20 milliseconds
	Rotational speed:	3,662 rpm
	Startup time:	20 seconds
	Spin-down time:	20 seconds

Interface	Connects directly to the Macintosh Plus, Macintosh SE, Macintosh SE/30, Macintosh II, Macintosh IICX, and Macintosh IIX via the external SCSI DB-25 connector.	Connects to the Apple IIe or Apple IIGS via the expansion port, using the Apple II SCSI Interface Card.
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Electrical requirements	Line voltage:	85 to 270 volts AC
	Frequency:	47 to 64 hertz
	Maximum power:	60 watts

Environmental requirements	Operating temperature:	50° to 104° F (10° to 40° C)
	Storage temperature:	32° to 122° F (0° to 50° C)
	Relative humidity:	20% to 80% noncondensing
	Operating altitude:	0 to 10,000 ft. (0 to 3,048 m)
	Shipping altitude:	-1,000 to 40,000 ft. (-305 to 12,192 m)

Size and weight	Height: 3.1 in. (7.8 cm)	Depth: 10.5 in. (26.6 cm)
	Width: 9.7 in. (24.6 cm)	Weight: 7.6 lbs. (3.45 kg)

Ordering Information

Apple Hard Disk 80SC
Order No. M2688/A

With your order, you'll receive:

- Apple Hard Disk 80SC
- Owner's guide
- Setup disk
- Power cord
- Apple SCSI System Cable
- Apple SCSI Cable
- Terminator
- Limited warranty statement

Apple II SCSI Interface Card
Order No. A2B2087

Apple Hard Disk 160SC

System Requirements

To use an Apple Hard Disk 160SC with a Macintosh personal computer, you must have:

- ▶ SCSI port

Product Details

▶ SCSI expansion

SCSI expansion lets you connect as many as six additional SCSI devices to a Macintosh.

Technical Specifications

Capacity

Data capacity:	160 megabytes (formatted)
Data surfaces:	5
Heads/Surface:	1
Block size:	512 bytes
Total disk blocks:	327,780
Blocks/Track:	32 to 54

Characteristics

Average seek time:	18 milliseconds
Rotational speed:	3,600 rpm
Startup time:	20 seconds
Spin-down time:	20 seconds

Interface

Connects directly to the Macintosh Plus, Macintosh SE, Macintosh SE/30, Macintosh II,	Macintosh IICX, and Macintosh IIX via the external DB-25 SCSI connector.
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Electrical requirements

Line voltage:	85 to 270 volts AC
Frequency:	47 to 64 hertz
Maximum power:	60 watts

Environmental requirements

Operating temperature:	50° to 104° F (10° to 40° C)
Storage temperature:	32° to 122° F (0° to 50° C)
Relative humidity:	20% to 80% noncondensing
Operating altitude:	0 to 10,000 ft. (0 to 3,048 m)
Shipping altitude:	-1,000 to 40,000 ft. (-305 to 12,192 m)

Size and weight

Height:	3.1 in. (7.8 cm)	Depth:	10.5 in. (26.6 cm)
Width:	9.7 in. (24.6 cm)	Weight:	9.5 lbs. (4.3 kg)

Ordering Information

Apple Hard Disk 160SC
Order No. M2666

With your order, you'll receive:

- ▶ Apple Hard Disk 160SC
- ▶ Owner's guide
- ▶ Setup disk
- ▶ Power cord
- ▶ Apple SCSI System Cable
- ▶ Apple SCSI Cable Terminator
- ▶ Limited warranty statement



Apple External Hard Disks

Apple Computer, Inc.

20525 Mariani Avenue
Cupertino, CA 95014
(408) 996-1010
TLX: 171-576

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