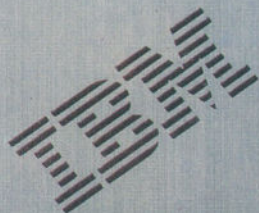
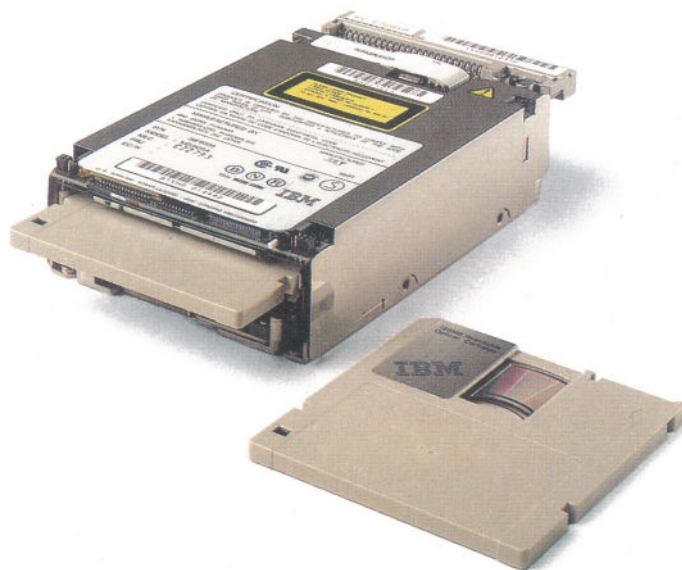


128MB Rewritable  
Optical Cartridge



*Optical media are acknowledged to be the next big wave in the continued advancement of computing performance. IBM is at the forefront of optical component development with this new Rewritable Optical Disk Drive, plus Rewritable or Read-only Optical Cartridges, which provide over 80 times the storage of standard 3.5-inch, 1.44 MB floppy disks.*

## IBM 3.5-inch Rewritable Optical Disk Drive and Cartridges



The IBM MD 3125A 3.5-inch Rewritable Optical Disk Drive and Cartridges set a new standard for efficient, high-volume data storage, with a capacity and portability designed to meet the needs of tomorrow's systems.

The IBM Rewritable Optical Disk Drive is the industry's most advanced 3.5-inch form-factor storage device. It attaches to a host system using the SCSI-2 interface. The 127 MB IBM Rewritable Optical Cartridge conforms to the ANSI-developed standards for optical media.

The disk drive accepts either a 3.5-inch IBM Rewritable Optical Cartridge, with up to 127 MB formatted capacity (which may be written and read many times), or a 3.5-inch IBM Read-only Optical Cartridge (O-ROM) with up to 122 MB. (Optical read-only media is intended for mass duplication and distribution – for example, of educational materials or parts catalogues.)

Both cartridges are equivalent in size to the standard 3.5-inch, 1.44 MB floppy disk, yet have a storage capacity over 80 times greater.

## Specifications

### IBM MD 3125A 3.5-inch Rewritable Optical Disk Drive

#### Seek time

Average 60 ms

Track/Track 1 ms

Average latency 16.7 ms

#### Data transfer rate

Disk to buffer (sync) 4.0 MB/s

Buffer to host (async) 1.5 MB/s

Disk rotation speed 1,800 rpm

#### Reliability

Hard error rate  $>10^{12}$  bits/hard error

MTBF 30,000 POH

#### Physical size

Width 101.6 mm

Height 41.3 mm

Depth of drive 146.0 mm

Depth of card 169.0 mm

Weight 0.75 kg

#### DC power requirements

Nominal supply 5V 12V

Tolerance (incl. ripple)  $\pm 5\%$   $\pm 5\%$

Supply current (idle) rms 0.94A 1.25A

Supply current (max) rms 1.56A 1.73A

Total power consumption rms

Idle 16.1W

Max 23.0W

#### Temperature

Operating  $+10$  to  $+40^{\circ}\text{C}$

Storage 0 to  $+60^{\circ}\text{C}$

Shipment  $-10$  to  $+60^{\circ}\text{C}$

#### Relative humidity (non-condensing)

Operating 8 to 80%

Non-operating 5 to 95%

#### Maximum wet bulb

Operating  $26.7^{\circ}\text{C}$

Storage/shipping  $29.4^{\circ}\text{C}$

#### Altitude

Operating 0 to 2,133 metres

Non-operating 0 to 12,000 metres

#### Shock

Operating 5G (11 ms)

Non-operating 35G (11 ms)

Vibration (operating) 0.25G (1 to 500 Hz)

### IBM Rewritable Optical Disk Cartridge and IBM Read-only Optical Disk Cartridge

#### User storage capacity

Rewritable 127 MB

Read-only 122 MB

Track density 15,900 tracks/inch

Bit density 24,400 bits/inch

Total number of tracks 10,000

Track format Spiral (CAV)

Tracking provision CCS

Number of sectors per track 25

Sector length 512 bytes

Standard ANSI X 3B11  
(Project 736-D)

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