

A new generation of optical solutions The evolution continues...

IBM is a pioneer in the storage industry and has been the technology leader in data storage for decades. This is especially true for optical storage products. From the co-invention of the diode laser through the discovery of rare-earth/transition metal magneto-optics to recent demonstrations of amazing density improvements with multilayer disks, IBM has demonstrated its commitment to optical technology leadership.

This leadership position continues with a new generation of the IBM 3995 Optical Library family: the 3995 C-Series. With 2.6GB optical technology and an improved library design, the C-Series deliver new levels of capacity and performance at a significantly lower price per megabyte.

True multifunction benefits

The 3995 C-Series provide you with significant benefits through the introduction of IBM's first-in-the-industry 2.6GB Extended Multifunction optical drives. These drives:

- double the capacity over previous
 5.25 inch 1.3GB optical technology
- provide the optimum media flexibility with support for PERMANENT Write-Once, Read-Many(WORM),CCW WORM and rewritable optical cartridges
- support three generations of 5.25 inch optical media giving continued access to previously written data
- automatically recognize and adjust to media type and density – no intervention required
- increase performance with faster read and write data rates

Permanent WORM, Magneto-Optical (MO) rewritable, and Continuous Composite Write-Once (CCW) WORM optical cartridges can be mixed within the same library to provide maximum flexibility in meeting your business needs.





IBM 3995 Optical Library C-Series

SCSI	C60	C62
LAN	C20	C22
AS/400	C40	C42
S/390		C32
S/390 Expansion Unit		C12
Capacity (unformatted)	52GB	135GB
Cartridges	20	52
Drives	1 or 2	2

^{*}The IBM 3995 C-Series Model C46 and Model C48 offer a maximum of 4 internal optical drives.

Flexible choices for performance and capacity

Up to five models, for each supported environment, provide enhanced granularity. IBM offers you the flexibility of selecting additional internal optical drives, except on the 135GB capacity model, to satisfy higher performance requirements.

The C-Series uses industry-standard 5.25 inch optical cartridges (ISO, and ECMA standards). These models are also compatible with previous generations of 5.25 inch technology, providing continued access to data on previously written cartridges, eliminating data migration.

The enhanced library design delivers improved performance with a faster auto-changer and a dual-gripper picker which enables cartridge exchanges to be performed in a single move.

The 3995 Optical Library family offers a broad range of solutions for IBM systems and the open enterprise environment. Five capacities are available ranging from 52GB to 671GB, and the 270GB capacity models are expandable to 405GB. This allows your storage capacity to grow with your business.

Multiple system support

RISC System/6000 and SCSI-2 attached systems

All five capacities are available for SCSI-attach to RS/6000, POWERparallel SP, Personal Computer and other open systems. Your chosen application must provide library driver and library manager functions. Application solutions are available from IBM, IBM Business Partners, and leading solution providers.







C64	C66	C68
C24	C26	C28
C44	C46 *	C48*
C34	C36	C38
	C16	C18
270GB	405GB	671GB
104	156	258
2 or 4	4 or 6	4 or 6

AS/400 systems

The five AS/400-attached models (52GB, 135GB, 270GB, 405GB, and 671GB) bring enhanced AS/400 synergy with support for OS/400 Hierarchical File System, Integrated File System, and Save/Restore commands (OS/400 Version/Release level dependent). This is the premier optical storage solution for your AS/400!

Token-Ring or Ethernet Local Area Networks (LAN)

The 3995 C-Series LAN models provide a fully integrated OS/2 file server solution that includes the optical library, a dedicated control unit, OS/2 and networking software, the IBM High Performance Optical File System (HPOFS) and the IBM Optical Library Manager for OS/2.

These five 3995 LAN models attach into either a Token Ring or Ethernet network and allow easy and transparent library access by applications and clients on the network. The 3995 C-Series LAN optical libraries include Network File System (NFS) support as a standard feature. Users in a distributed computing environment can use NFS for remote file sharing, remote file mounting, and remote file locking functions. Network File System support allows data sharing between the IBM 3995 Optical Library and other OS2, AIX, and S/390 environments.

As with the previous 3995 LAN models, the C-Series optical libraries support the AS/400 Hierarchical File System interface, enabling easy integration into an AS/400 environment.

Prepackaged and preloaded, these libraries are ready to meet your optical storage application requirements!

Eliminate paper and microfiche with an IBM 3995 Optical Library!

The IBM 3995 Optical Library is ideally suited to enable new business applications to bring data online:

- Evolve from the cost and drudgery of manual systems to reap the benefits of real time information.
- Extend your competitive advantage through reduced costs, increased productivity, and improved customer service.

Enhancements to proven technology, along with low cost, high capacity, and direct access make optical storage an excellent solution for keeping existing data online for longer periods:

- Permanent WORM technology supports indelible recording providing long-term and/or permanent data archive to satisfy business and/or legal requirements for data retention.
- CCW WORM technology addresses business requirements for an unalterable copy of the data.
- Magneto-optical rewritable media provides a less expensive solution for short-term data retention.
- Removable cartridges for shelf storage as the data becomes aged and access becomes less frequent, allow additional capacity at a very low incremental cost.

The 3995 is supported by a broad range of industry-leading software solutions and the opportunities enabled are virtually unlimited:

- Document imaging applications can be used to replace paper documents such as business records, medical and patient records, engineering drawings, product diagrams, etc.
- Computer Output to Laser Disk (COLD) applications can be used to replace microfiche and microfilm copies of customer and billing statements, transaction records, customer lists, payroll and accounting reports, etc.
- Hierarchical storage requirements can be met by using the library for archiving your computer files and storing historical data.

With all the benefits offered by the IBM 3995, you simply can not afford to store your information assets on paper and microfiche any more!

S/390 and enterprise systems

Systems Managed Storage in the MVS/ESA environment provides support for the seven S/390-attached models through the IBM Object Access Method facility. Four models include a dedicated control unit and provide from 135GB to 671GB of direct access optical storage. To allow for easy growth, three expansion unit models are available. These models provide up to 1.342TB of optical storage within one single 3995 C-Series optical library subsystem.

The dedicated control unit provides OAM interfacing, 3995 Optical Library management, and support for IBM's innovative High Performance Optical File System (HPOFS). Enhanced error correction code (EEC), memory buffers and hard drive directory caching are additional control unit features. To handle operator functions such as managing shelf stored optical cartridges, an operator accessible internal optical drive is included as a part of the control unit – a total solution for your S/390 optical storage requirements!

The IBM 3995 Optical Library C-Series offer new levels of capacity, performance and flexibility for all your optical storage requirements.

Industry Standards

The 3995 supports IBM 5.25-inch optical cartridges which are compatible with the industry standards listed below.

- ISO/IEC DIS 15486: Data interchange on 130 mm optical disk cartridges of type WORM (Write Once Read Many) using irreversible effects – capacity: 2.6GB per cartridge
- ISO/IEC DIS 14517 130 mm optical disk cartridges for information interchange – capacity: 2.6GB per cartridge
- ISO/IEC 13549: 1993 Data interchange on 130 mm optical disk cartridges – capacity: 1.3GB per cartridge

- ISO/IEC 11560: 1992 Information interchange on 130 mm optical disk cartridges using the magneto-optical effect, for write once, read multiple functionality
- ISO/IEC 10089: 1991 130 mm rewritable optical disk cartridge for information interchange.

Media

IBM Optical Media can be ordered via feature codes, from IBM Media or Supplies Distribution, or from authorized dealers. To order IBM media and supplies in the United States, call toll-free 1-888-IBM-MEDIA (1-800-426-6334) today.

Let us tell you more

For further information on the IBM 3995 Optical Library C-Series, contact your IBM representative or IBM Business Partner.

In the U.S. or Canada, you can also call IBM Direct: 1-800-IBM-CALL

(1-800-426-2255).

Internet: www.storage.ibm.com



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