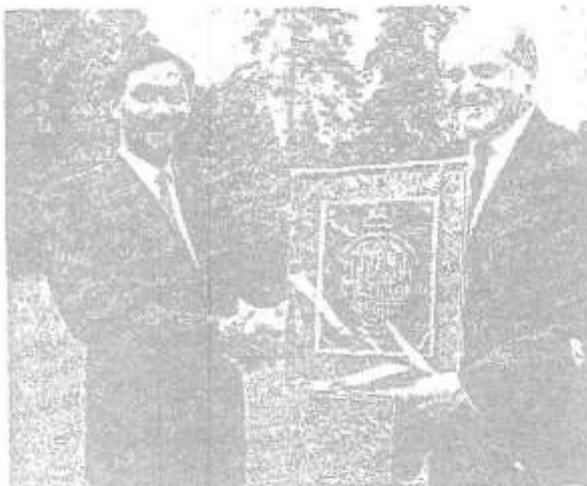


# M4 Data wins ICL award

FRIMLEY'S M4 Data has beaten off world-wide opposition to become the only British supplier to win one of the top ICL Vendor Awards for 1987.

The company is at Lyoo Way, Frimley, and has just been chosen as Best Magnetic Tape Supplier for its 8900 tape drive. The award was presented to chief executive Duke Ebenezer at ICL's vendor conference.

The award is in recognition of M4 Data's "excellence in supplier quality, cost and service."



ICL's peripheral product engineering manager John Pritchard (right) presents the award to Duke Ebenezer.

## SALES

The firm is a leader in the design, manufacture and marketing of a range of half-inch computer tape drives and optical disc systems.

A British company with its manufacturing plant in Frimley and research at Wells in Somerset, it also has wholly-owned subsidiaries in America and Germany.

With sales and service offered around the world, M4 now exports over 60 per cent of its output.

The firm was formed two years ago by two former directors of Thorn EMI Dataweb in part of a management buy-out of the Data Products Division of that company. It now employs 120 people.

Its 8900 tape drive is one of the current range of three half-inch streaming tape drives, and was the first in the world with true stop-start performance.

## PRODUCTS

"Over 10 years continuous experience in designing for reliability has been invested in M4's range and we are extremely pleased to win this award from such a quality-conscious company as ICL, especially when the competition has been from larger American and Japanese companies," said Mr. Ebenezer on receiving the award.

Mr. Ebenezer later said that he will soon be announcing more major products for release later in the year.

It's not what you

FROM THE INDUSTRIAL PAGE  
OF THE CAMBERLEY NEWS AND  
2 AUGUST 1988  
LOCAL NEWSPAPER COVERING  
LOCAL TOWNS

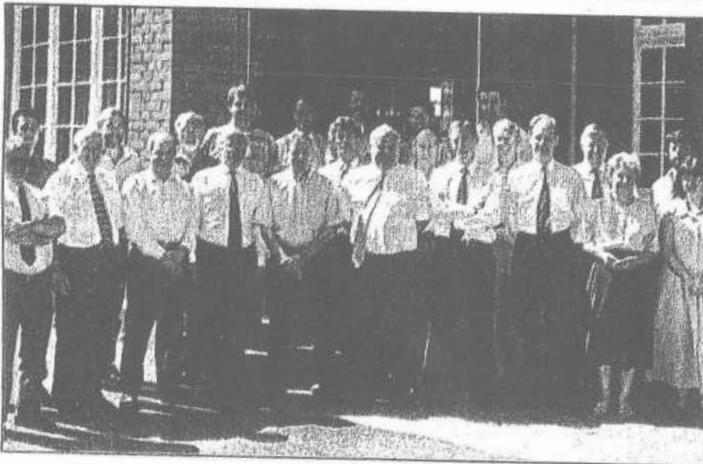
d  
d  
u  
o  
n  
t  
k  
to  
of  
st  
ed  
re  
id  
7  
st  
6,  
to  
to  
re  
to  
ve  
ee  
re  
ut  
op  
of  
ha  
sh  
na  
ba  
ha

## News

Award-winning data company based in old hospital goes from strength to strength



# Cutting-edge technology



M4 Data's research and development centre at the old Mendip Hospital in Wells

## FACT FILE

- M4 Data was founded in July 1986.
- The company employs 490 design engineers and spends a significant amount of its revenue on research and development.
- The research and development part of the company has been designing and manufacturing magnetic tape drives for almost 20 years.
- The team won a British Design Council Award in



A technology company with its headquarters in an old Wells hospital ward is a world leader in the field of computers.

M4 Data was founded in July 1986 as the result of a management buy-out from Thorn-EMI Datatech, previously based at Wookey Hole.

Since then the company, now run at the former Mendip Hospital, has become solidly established as the only independent European manufacturer of high-performance tape drives for the computer industry.

Development manager David Cutler said turnover for the last financial year was almost £20 million, most of which was exported.

M4 Data has wholly owned subsidiaries in the United States, Germany, China and India, and is represented by distributors in all other major companies around the world.

The company has recently won an award from the Department of Trade and Industry for

By Michael Chamberlain

an advanced development project.

It was won in the face of stiff competition across the country.

A cash award of £133,000 was made under the Small Firms Merit Award for Research and Technology scheme, a national competition which aims to encourage innovation.

Applications were invited from small and medium-sized businesses in England and awards were made to successful applicants in technologies of interest to the DTI.

"M4 Data plans to use the funding to pay for part of the development costs of a new state-of-the-art tape drive unit," said Mr Cutler.

The DTI has also supported the company on an earlier product development programme through the SPUR (Support for Projects and Research) scheme.

"M4 Data was the only company in the South West to win

the prestigious SPUR achievement award presented by the DTI," said Mr Cutler.

Other awards in recent years include the Small Firms Manufacturing Excellence Award, organised jointly by the Institute of Electrical Engineering and the Institute of Mechanical Engineering Institution.

"The competition for the award is run every two years and M4 Data has won it for the last two times," said Mr Cutler.

The company, which employs about 40 design engineers, spends a significant amount of its revenue on research and development.

Its corporate headquarters and research and development facilities are based at Wells.

A manufacturing department with a 37,000 sq ft building is located near Camberley.

The firm has 170 employees in addition to those engaged in research.

The managing director is Dr Duke Ebenezer and director of sales and marketing is David Huntingdon.

science went to European companies. The company is also ranked top in the world league table.



Winners of recent ICI Quality Awards to suppliers. From right: John Pritchard, manager, peripheral product engineering, ICI; Kiyomiaki Yae, managing director, Oki Europe; Takashi Matsutani, manager, cooperative project division, Fujitsu; Steve Shimizu, director, Panasonic Industrial UK; and Duke Ebenezer, chief executive, M4 Data.

M4 Data's research and development centre at the old Mendip Hospital in Wells

**FACT FILE**

- M4 Data was founded in July 1986.
- The company employs 490 design engineers and spends a significant amount of its revenue on research and development.
- The research and development part of the company has been designing and manufacturing magnetic tape drives for almost 20 years.
- The team won a British Design Council Award in 1984 for developing the world's smallest seven-inch open reel tape drive.
- Dr Duke Ebenezer is the company's chief executive. He has previously held senior appointments with Burroughs Corporation, Thorn EMI and StorageTek.
- Customers include British Telecom, Fujitsu and McConnell Douglas in the United Kingdom. Other customers are in France, Korea, Japan, the Netherlands, Germany and North America.
- M4 Data maintains offices around the world, including the USA, Germany, India and China.



Technical manager Derek Wotton, left, and mechanical designer Lee Neale testing equipment at M4 Data



The award winning team at Wells-based M4 Data, with director of finance Nigel Hunt fourth from the right in the front row

WOOLLEY FILE.

Since then the company, run at the former Mendip hospital, has become solidly established as the only independent European manufacturer of high-performance tape drives for the computer industry.

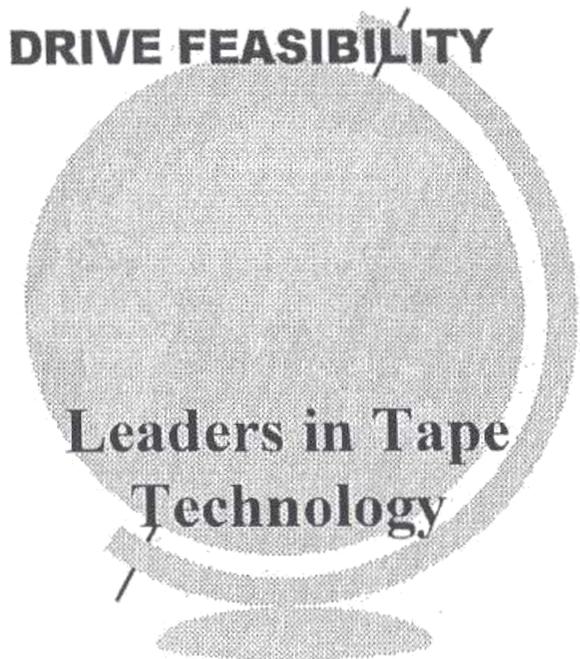
Development manager Derek Cutler said turnover for the financial year was almost £10 million, most of which was exported.

M4 Data has wholly owned subsidiaries in the United States, Germany, China, India, and is represented by distributors in all other major countries around the world.

The company has recently won an award from the Department of Trade and Industry

# COMPANY AWARDS & ACHIEVEMENTS

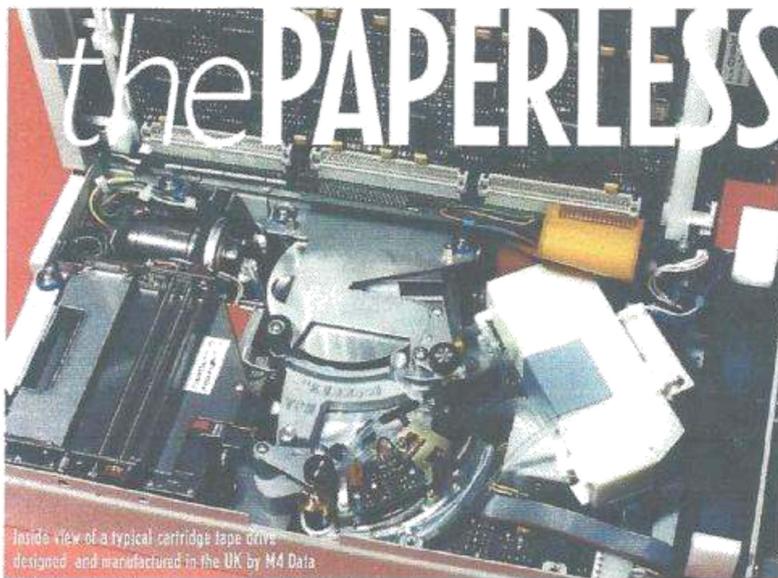
- 1990 **ELECTRONICS WEEKLY DESIGN EXCELLENCE AWARD**
- 1990 **UK DTI SMART AWARD**
- 1989 **STRATEGIC ALLIANCE WITH STORAGETEK**
- 1988 **PRIME COMPUTERS SUPPLIER QUALITY AWARD**
- 1988 **MAJOR SUPPLIER CERTIFICATION TO HP**
- 1987 **ICL VENDOR OF THE YEAR AWARD**
- 1987 **ICL PART FUNDING AWARD - CARTRIDGE DRIVE FEASIBILITY**
- 1984 **DESIGN COUNCIL AWARD (9800)**



# COMPANY AWARDS & ACHIEVEMENTS

- 1999** QUEENS AWARD FOR EXPORT ACHIEVEMENT
- 1997** SPUR ACHIEVEMENT AWARD (TWIN PEAKS)
- 1997** MIAA FINALIST (TWIN PEAKS)
- 1996** UK SMALL FIRMS MANUFACTURING EXCELLENCE AWARD
- 1995** SPUR AWARD (LIBRARY DEVELOPMENT)
- 1994** UK SMALL FIRMS MANUFACTURING EXCELLENCE AWARD
- 1994** ISO 9001 WELLS DESIGN & MANUFACTURING
- 1993** EUREKA FEASIBILITY STUDY AWARD
- 1993** ISO 9002 WELLS MANUFACTURING
- 1992** ISO9002 FRIMLEY MANUFACTURING
- 1992** BRITE-EURAM AWARD (LIBRARY FEASIBILITY)
- 1992** UK DTI SPUR AWARD (TWIN PEAKS)





Inside view of a typical cartridge tape drive designed and manufactured in the UK by M4 Data

# the PAPERLESS OFFICE

a new generation of automated library products is at the cutting edge of information management. **M4 DATA** is a leading innovator in this field. david cutler, business development manager, talks to jayne flannery about the company's new data storage products

**the paperless office** is becoming a reality. Yet the data storage requirements of modern commerce are expanding all the time. Information can be shared and exchanged in previously unimagined volumes and at unimagined speeds. Intellectual capital has become the new currency of the 21st century. But all that data must be stored and managed in a retrievable format.

The most radical change data storage has undergone in recent years is the evolution of the storage medium. The filing cabinet is as antiquated as the typewriter. The challenge for data storage specialists such as M4 Data is the need to store ever-increasing amounts of information in an ever-decreasing physical space. M4 Data have succeeded in carving out a profitable niche in the field of network backup and data interchange. The company has more than twenty years' experience in developing, manufacturing and supplying advanced tape drive and automated tape library solutions. The product range extends from 9, 18 and 36-track tape drives to fully automated tape libraries.

David Cutler, business development manager, has no doubt that the future lies in increased automation. Accordingly, the product portfolio of M4 Data is led by the MagFile 20, a DLT library with true incremental scalability and resilience. It is the end product of many years of development and was launched in late 1999. David Cutler comments, "We see it as the first product in a new

family of automated systems. We are long-established manufacturers of independent tape drives but the MagFile 20 marks a shift into a different style of manufacturing. Now we buy mass-produced, lower-cost drives and add in value through the robotics."

The new system contains a wealth of product innovation and improvement. MagFile's high volumetric efficiency and less than 7-inch height are impressive enough compared to other DLT libraries. Yet there are also many additional features such as two 10-cartridge magazines, a dedicated cartridge cleaning slot, hot-swap tape drives, MagLink express hardware and integrated power supplies. All this is fitted in one small module. It represents a major achievement and David Cutler is pleased to discuss its advantages. "Our system occupies the smallest volumetric space in relation to its data storage capacity. It is also very user friendly and simple to operate. The fact that cartridges can be moved between MagFiles enhances its versatility. If a drive ever went down it would just be a question of exchanging the cartridge and carrying on. The system would still function."

If the MagFile 20 represents the first generation what will the second look like? I learn from David Cutler that M4 Data is now producing a stacking system of MagFiles. "The original product was supplied on a stand-alone basis but by supplying cabinets with a shuttle mechanism to



Heather Couper presents David Cutler with the SMART award for Innovation



head office: R&D laboratory, Wells, Somerset

exchange cartridges, there is greatly added flexibility and scalability," he explains. Upgrading storage requirements to match the corporate requirement has never been cheaper or easier.

David Cutler believes the company's manufacturing expertise is a source of considerable strength. "We employ three major techniques," he says. "Firstly there are our mechanical design skills which come into play when we are working on intricate mechanisms. We see ourselves as a great innovator in this field. Then there is the electronic design involved in producing printed circuit boards. This is a complex, high-density process. Lastly, there is the software. A lot needs to be written to drive our machines and interface with mainframe computers and workstations. Our corporate strength lies in our ability to blend these three disciplines."

M4 Data could hardly be unaware of the implications of technological advance but it is interesting to hear David Cutler highlight the

particular window of opportunity he sees for the company. "The world wide web is coming on in leaps and bounds and so we are working on web attached products. We can communicate with or talk to our products now. In the unlikely event of a glitch we have the facility to interrogate a product remotely, put a trace on it and decode the problem from anywhere in the world."

The company's contribution to advanced data storage solutions has been recognised through several major awards. After increasing their exports fourfold within two years, the Queens Award for Export Achievement in 1999 was well received. The DTI has been another source of accolades. The Small Firms Merit Award for Research & Technology has enabled M4 Data to develop a radical new combination of optical and magnetic storage technology. It is encouraging to know that another small British player can compete in the development of world-class products and systems. ●

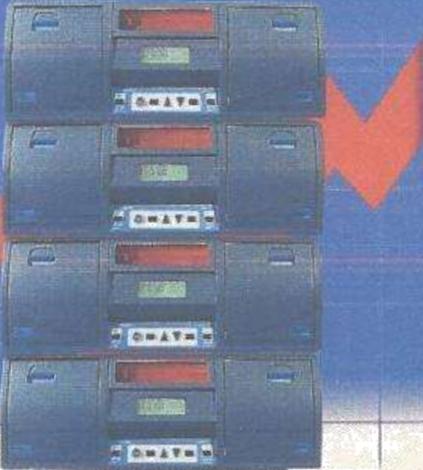
"our system occupies the smallest volumetric space in relation to its data storage capacity. It is also very user friendly and simple to operate."

DAVID CUTLER



## MagFile™ and MagStak™

### The ultimate DLT library solutions



- Truly incremental field scalability for lower initial cost and future-proof growth capability
- 1 or 2 DLT drives + 20 cartridges, expanding to 20 drives & 200 cartridges
- 200 GB to 16.8 TB data storage scalability
- Highest cartridge density in its class
- SAN/Web attachments
- Intelligent, hot-swap modules
- Unmatched resilience to failure
- Twin 10-cartridge magazines in each module
- Dedicated import/export slot

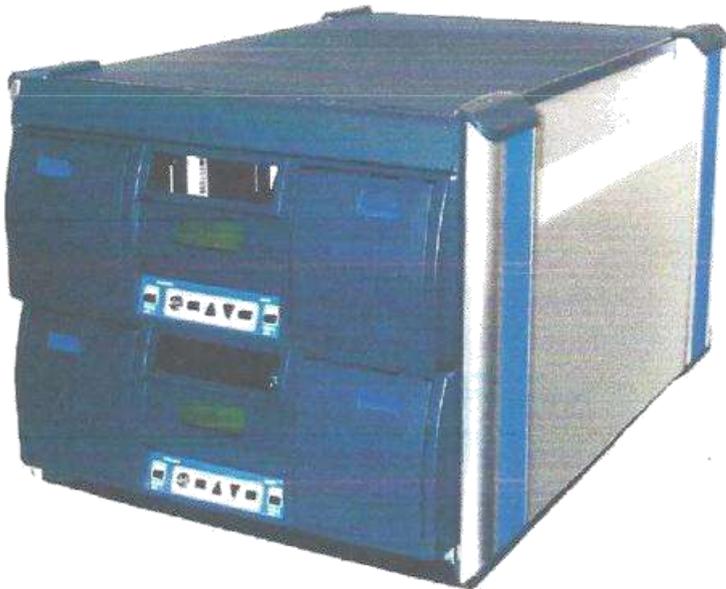
**Pay as you grow.... and grow....and grow**

M4 Data Limited, Saxony Way, Blackbushe  
Yateley, Hampshire, GU46 6GY  
Tel: (+44) (0)1252 864864, Fax: (+44) (0)1252 864865  
Email: sales@m4data.co.uk. Web: www.m4data.com



### MagFile系列磁带库的特性

优先的mailbox 磁带处理，且可在线更换磁带；用清洁带自动清洁；100%的快速装载，20盒磁带只需几秒；易使用的前端操作面板；直观的按键和清晰的菜单显示；简单的设置和诊断，方便用户设置磁带库的SCSI ID号码，了解磁带库、驱动器的状态及其他有用的信息；内置条码读入器，可更快速地查询、读写；坚固可靠的机械手；易于远程管理；磁带易于处理、运输、保存；每盒磁带可简单标识并易于循环多次备份使用；数据的镜像和拷贝不会混淆；可分别设置数据的输入和输出功能（分级管理）；可随时与网络或服务器联结，如：联



结到Ethernet后通过Web远程管理；与光纤进行高带宽联结。可用于下一代磁带技术（如LTO；超级DLT等）；适合于SAN，RAIL等环境；结构紧凑的MAGFILE20磁带库节省空间，安装容易，并支持热插拔驱动器、绝大多数系统和软件；采用小巧、简单、可靠轴向机械手、高精度的线性轴承及闭环回路的数字伺服机构保证其可靠性达1000000次；采用热插拔驱动器及热插拔电器模块技术，更容易维护、保养；各部件相对独立的冷却系统更保证了整个系统的可靠性和使用寿命；自动磁带清洁；紧凑的结构设计（仅7吋高）不仅单位空间可容更多的磁带，而且节省费用和空间。

### 真正的扩展性

MagFile与目前的磁带库相比为用户带来了全新的创意。过去，许多公司常提及她们的磁带库产品的扩展性，实际上其只是能多加几个驱动器或磁带。而MagFile20可以与MagLink配合，而不再需要独立的控制模块。允许用户根据目前的网络和数据情况把几个（最多10个）联接在一起而成为更大容量的磁带库MagStak，这样可为用户提供200盘磁带，20个驱动器的大容量的磁带库，容量达8TB，传输率达120MB/秒，从而实现真正的扩展并真正保护了用户的投资。在扩展中，用户可选无驱动器的MagFile20，而以后也可方便增加驱动器。MagLink的机械手以6英尺/秒的速度快速地送取磁带，保证了整个MagStak可高速读写数据。每个MagFile模块中的磁带可放到任意一个MagFile模块中读写，任意一个MagFile模块中驱动器出现故障，不丝毫影响MagStak的连续工作，结合MagFile的热插拔驱动器及热插拔电器模块技术，

实现了MagStak的全容错。易操作、易安装、易升级并具有MagFile所有优点的MagStak真正迎合了绝大多数的应用要求，适用于绝大多数应用环境。



ModernTech

捷华润技贸有限公司

www.moderntech.com.hk

Tel:(00852)23413380 Fax:(00852)23426112

北京西苑饭店7号楼57245-57249

深圳市保安南路北京大厦1107室

电话: (010) 68313388 57245-57249

电话: (0755) 5563377 5581367

邮编: 100044

邮编: 518001

E-mail: bjsale@moderntech.com.cn

E-mail: szsale@moderntech.com.cn



### 享誉中国的英国 M4 Data

享誉中国的英国M4 Data 公司在过去十年为中国用户，特别是中国的邮电、石油、公安、安全等部门提供了高可靠性、高品质的9轨、36轨磁带机，并得到了最广泛的认同和赞誉。现在M4 Data公司秉承其一贯的作风并集其十多年设计、生产磁带机的经验再次为中国用户提供更迎合绝大多数用户需要的真正意义上的可升级 DLT磁带库 MagFile系列。



### 最佳的DLT磁带库解决方案

MagFile 是M4公司通过对众多用户的调查、咨询而设计制造出来并能完全满足用户各种需求的顶级 DLT磁带库产品。MagFile 拥有多项远远超过现在的磁带库的优秀特点。创新的工程设计保证了小巧、超值的 MagFile 能满足绝大多数的应用要求，真正的可伸缩性提供了最低的原始价格并保证了未来的扩

展。理想的磁带驱动装置保障了高可靠的性能。高可靠性的轴向机械手和冗余结构设计保证了高伸缩性和长寿命，特有的显示面板更方便用户管理、监控、设置MagFile磁带库。

### MagFile系列磁带库的配置

MagFile20采用2个磁带匣，每个磁带匣可装10盒磁带，支持一个或两个DLT8000、DLT7000、DLT4000驱动器，自然容量达800GB，另外还有一个清洁磁带

位，此清洁磁带位也可以设置为磁带位。标准配置一个一位的 Mail-Slot及条码读入器，

只有7吋高并适用于19吋机架，可与网络或光纤联结，可选Web联结选件。

MagFile10采用1个磁带匣，每个磁带匣可装10盒磁带，支持一个或两个DLT8000、DLT7000、DLT4000驱动器，自然容量达400GB，标准配置一个一位的 MailSlot，可选条码读入器，只有7吋高并适用于19吋机架，可升级为MagFile 20。

- 真正的扩展性
- 简单、容易从20盒的容量扩展到200盒的容量

- 达8TB的自然容量
- 双10位的磁带驱动器

- 热插拔磁带驱动器
- 可应用于绝大多数系统
- 清洁带自动清洁

- 结构紧凑、节省空间、(仅7英寸高)

- 可用于将来的磁带技术
- 可适合将来的 PCI总线结构
- 可光纤通道连接，并能远程网络管理



# MagFile 20

DLT Library with True Incremental Scalability



*The most customer-requested features of any DLT Library*

## The best DLT library solution you'll find

What makes MagFile™ the best DLT library solution is simply this – M4 Data asked tape library users what they wanted in the ultimate DLT tape library, and then designed it for them.

MagFile is much more than the sum of the best existing library features. Innovative engineering has made it possible to place the most requested features into the *smallest, best value package*. Truly incremental scalability provides lower initial cost and investment protection when your needs grow. Optimal cartridge-to-drive ratios maintain high performance. Robust tri-axial robotics and built-in redundancies provide high reliability and long life. Plenty of frills without the gimmicks.

By combining top-demand features with unbelievable economies of scale and price, the result is the best and most cost-effective DLT automated library solution you'll find.

## Future-proof design for investment protection

### True scalability

Imagine a library system that can be expanded incrementally as your network grows. That's MagFile – *the library that optimizes your capacity, performance and budget needs*.

Each MagFile 20 module contains one or two tape drives and twenty DLT cartridges in two removable bulk-load magazines. But that's only the beginning. Additional modules, each only 7 inches high, can be stacked to create a 10-module library system of 200 cartridges and up to 20 drives (all hot-swappable). Such an arrangement provides a storage capacity of up to 8 TB (native) and an almost incredible bandwidth of 120 MB/second (432 GB/hour).

These intelligent modules self-configure into an expanded library system where *all tape cartridges are accessible to all tape drives*.



With standard 2:1 data compression, MagFile's specification soars to 16 TB capacity and 240 MB/second (864 GB per hour). All of this fits into one standard 6-foot-high rack!

True incremental scalability allows you to pay for the storage that you need, when you need it, without losing your initial investment in library hardware or software. *This is the promise that MagFile's architecture makes – and delivers.*

## Unique Features & Benefits

- True incremental scalability
- Expands easily from 20 to 200 cartridges

- Up to 8 TB native storage
- Twin 10-cartridge magazines for 100% bulk loading

- Hot-swap tape drives
- Works with the most popular software packages
- Cleaning cartridge slot

- Space-saving 7-inch (4U) height
- Highest cartridge density in its class

- Designed for future tape technologies
- Future-proof PCI bus architecture, fibre channel option, remote web admin



*Pay as you grow.... and grow.... and grow*



MagFile is the *easiest DLT library system* to expand – self-contained modules are simply stacked on top of each other like building blocks. It is effective and economic, and really is child's play to achieve.

*Saves space, fits easily on desktops, or stacks comfortably in racks*

### More cartridges in less space

MagFile solves another big problem – making the best use of limited space. Its brilliant pace-setting architecture allows MagFile to fit more DLT cartridges (with multiple tape drives!) into the smallest space – period. And it does this in only 7 inches of vertical rack height. Rackmount or desktop, MagFile's low height and *high volumetric efficiency* saves valuable space. Another bonus from M4 Data!

# MagFile 20..... stacks up nicely

## Exceptional Performance and Reliability



Ingenious, Innovative, Revolutionary, & with DLT



### Optimized capacity and performance

MagFile™ can maintain the optimum DLT cartridge-to-drive ratio of 10:1, no matter how much you expand the library. MagFile never makes you sacrifice performance for capacity.

To maintain optimal performance and reliability, MagFile provides one dedicated cleaning cartridge for every two drives. Only MagFile DLT libraries provide automatic drive cleaning without having to give up any of the 20 data cartridge slots – you can even replace the cleaning cartridge with a data cartridge.

### Easiest to use

MagFile has one of the simplest, easiest-to-use operator/control panels. Simple, intuitive menus – just set it and forget it.

Twin 10-cartridge magazines allow new applications and uses: store multiple backup data sets; separate magazines for 'input' and 'output' tapes; use one magazine for backups and the other for normal I/O processing; and make simultaneous copies of backups. Plus the convenience of *full bulk loading* of all cartridges for easy handling and transportation.



### Engineering excellence

Compared with other DLT libraries, MagFile's high volumetric efficiency and low 7-inch height are impressive enough. But the designers really pushed the envelope when they also included two 10-cartridge magazines, a dedicated (21st) cleaning cartridge slot, priority access 'mailbox' slot, hot-swap tape drives, control module electronics, MagLink™ express-link hardware, and integrated power supplies, *all within the dimensions of the MagFile module!!* No need for separate control modules, pass-through ports, or power supplies that take up valuable rack space.

### MagFile Library family

MagFile 20 is part of a whole range of *scalable DLT library products*, with solutions ranging from 10 cartridges to over 200 cartridges.

### Award-winning design and manufacture

M4 Data products have a long heritage with a great pedigree. We have been developing, manufacturing, and supplying advanced tape drives and automated tape library solutions to major computer resellers and users for over 20 years. We have won several international awards for design and manufacturing excellence.

### SAN/Web attachments

Due to its built-in PCI architecture, the MagFile 20 can offer options such as Fibre Channel interface for direct connection to Storage Area Networks and Ethernet for direct access from web browsers.

### Specification

Capacities*	DLT8000: 800 GB to 8 TB
Throughputs*	DLT8000: 43.2 to 432 GB/hr
Tape Drives	DLT8000, DLT7000, DLT4000
Interface	Fast/Wide SCSI-2 Single-ended, differential or LVD option  Fibre channel option
Reliability	MSBF greater than 1 million exchanges
Scalability	From 20 cartridges & 1 tape drive to 200 cartridges & 20 drives
Configurations	Desktop or rackmount

#### \*Native values

For more information, please give us a call or browse our website at <http://www.m4data.com>

Standard 3-year warranty, with upgrades available in selected locations.

Specification is subject to change without notice.

MagFile patents pending.

MagFile™ & MagLink™ are trademarks of M4 Data.

DLT™ is a trademark of Quantum Corporation.

**M4 Data**  
**The intelligent choice**

The most customer-requested features of any DLT Library

M4 Data Inc.  
4451B Enterprise Court  
Melbourne  
Florida 32934  
USA  
Tel: (+1) 407 255 0666  
Fax: (+1) 407 253 0970  
sales@m4data-usa.com

M4 Data Inc.  
933 Pearl Court  
Cheyenne  
Wyoming 82007  
USA  
Tel: (+1) 307 632 9957  
Fax: (+1) 307 632 9982  
sales@m4data-usa.com

M4 Data Ltd.  
Lyon Way  
Frimley Road  
Camberley  
Surrey GU16 5ET  
England  
Tel: (+44) 1276 63401  
Fax: (+44) 1276 29785  
sales@m4data.co.uk

M4 Data GmbH  
Ludwig Wagner Strasse 41a  
D-69168 Wiesloch  
bei Heidelberg  
Germany  
Tel: (+49) 6222 9228-0  
Fax: (+49) 6222 9228-22  
sales@m4data.de

M4 Data (India)  
#486  
6th Main  
RMV II Stage  
Bangalore  
India 560-094  
Tel: (+91) 80 341 6068  
Fax: (+91) 80 341 6930  
sales@glasbg01.vsnl.net.in

M4 Data Ltd.  
Beijing Office  
Room 57245, Xiyuan Hotel  
Beijing 100044  
China  
Tel: (+86) 10 6831 3388  
ext. 57246 to 57249  
Fax: (+86) 10 6835 1665  
mtc@public3.bta.net.cn

