

Tape

M2488
Tape Drive



Speed, capacity, reliability...
Fujitsu's low-profile M2488 tape drive is designed for high-volume near-line and off-line storage applications.

Performance is the Key.

The M2488 offers high-speed data access and rapid transfer rates in a compact, device-level tape drive. Fujitsu engineered this drive for optimal speed and efficiency when moving, storing or accessing large blocks of data. The M2488 utilizes a range of high-speed, high-performance technologies to optimize data movement across the entire computer system — from off-line archives to on-line applications. The combination of faster data transfers, rapid search speeds, quick rewinds, swift positioning, short load/unload cycles and effective buffering can virtually eliminate sluggish, peripheral-bound operations that can cripple system efficiency and productivity.

- Performance – up to 20 MB/sec data transfer rates, advanced interfaces, fast search speeds, quick rewind, rapid positioning, short load/unload cycles, efficient buffering
- Compatibility – ANSI-Standard media, format and compression based on IBM 3480/3490E technology for easy data interchange
- Reliability – proven technology from a technology leader and the best MTBF in its class
- Flexibility – a choice of configurations for maximum flexibility, now and into the future

Mobile
Desktop
Enterprise

Physical Dimensions		
	Drive	ACL
Height	127 mm (5.0 inches)	127 mm (5.0 inches)
Width	217 mm (8.5 inches)	217 mm (8.5 inches)
Depth	400 mm (15.7 inches)	226 mm (8.9 inches)
Weight	12.0 kg (26.5 lbs.)	5.1 kg (11.2 lbs.)
	5 Cartridge Magazine	10 Cartridge Magazine
Height	231 mm (9.1 inches)	388 mm (15.3 inches)
Width	128 mm (5.0 inches)	128 mm (5.0 inches)
Depth	139 mm (5.5 inches)	139 mm (5.5 inches)
Weight	w/o cart. 1.0 kg (2.2 lbs.) w/ cart. 2.3 kg (5.1 lbs.)	w/o cart. 1.5 kg (3.3 lbs.) w/ cart. 4 kg (8.8 lbs.)
	FACL	7 Cartridge Magazine
Height	254 mm (10.0 inches)	218 mm (8.6 inches)
Width	217 mm (8.5 inches)	125 mm (4.9 inches)
Depth	305 mm (12.0 inches)	126 mm (5.0 inches)
Weight	11.0 kg (24.3 lb.)	w/o cart. 0.7 kg (1.5 lb.) w/ cart. 2.4 kg (5.3 lbs.)
Power Requirements		
Input Voltages:	100 to 120VAC/200 to 240VAC Auto Switching	
Input Frequency:	50 to 60 Hz	
Input Power:	150 Watts maximum	
Heat Dissipation:	512 BTU/hour	

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Easy Data Interchange

The M2488 employs ANSI-Standard media with compression algorithms based on IBM 3480/3490E technology, assuring the easiest, most secure data interchange across complex computing platforms. That means important corporate data will always be available when it's needed, even when it's moving across mainframes, UNIX workstations, servers, distributed computing nodes and an assortment of storage subsystems. And for systems already using 3480/3490E

components, the M2488 is a perfect, low-cost, high-performance storage replacement solution.

18 Track Write: M2488E

The new M2488E/EA/EF tape drive reads and writes 36 track tapes and reads 18 track tapes in IBM compatible format. For maximum tape interchange flexibility, the new 18 track write feature allows writing tapes in an industry accepted 18 track format. This feature may be enabled from the operator panel or through a SCSI command by the initiator.

Superior Reliability

In the computing world, Fujitsu has long been recognized as a leader in quality and reliability. The M2488 clearly demonstrates this long-held commitment, as demonstrated by the drive's industry-leading MTBF and full two-year warranty.

The Flexible Storage Solution

The M2488 is available in a variety of configurations to accommodate a range of customer options. Both

desktop and rackmount models can be configured with the following features and functions:

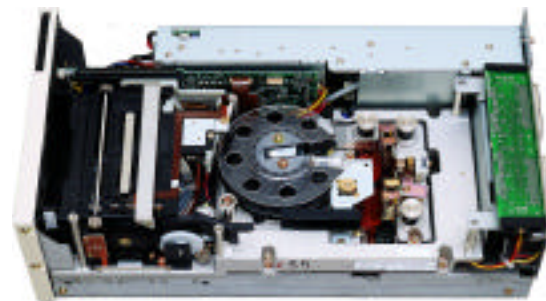
Automated Cartridge Loader (ACL): provides the sequential or random processing of up to ten cartridges to support the unattended backup of a maximum of 24 GB of data. **Flush-Mount Automated Cartridge Loader (FACL):** supports sequential or random processing of seven cartridges (16.8 GB maximum). It has the advantage of an automatic cleaning function.

Interface Personality Module (IPM): this convenient feature enables the M2488 to support a variety of SCSI interfaces that can be easily configured to address current and future requirements. **Seismic Data Feature (SDF):** this feature facilitates a Read-After-Write verification process of data written to tape. It is ideal for seismic and other applications

where it is critical to ensure recorded data is not corrupted.

About Fujitsu Computer Products of America

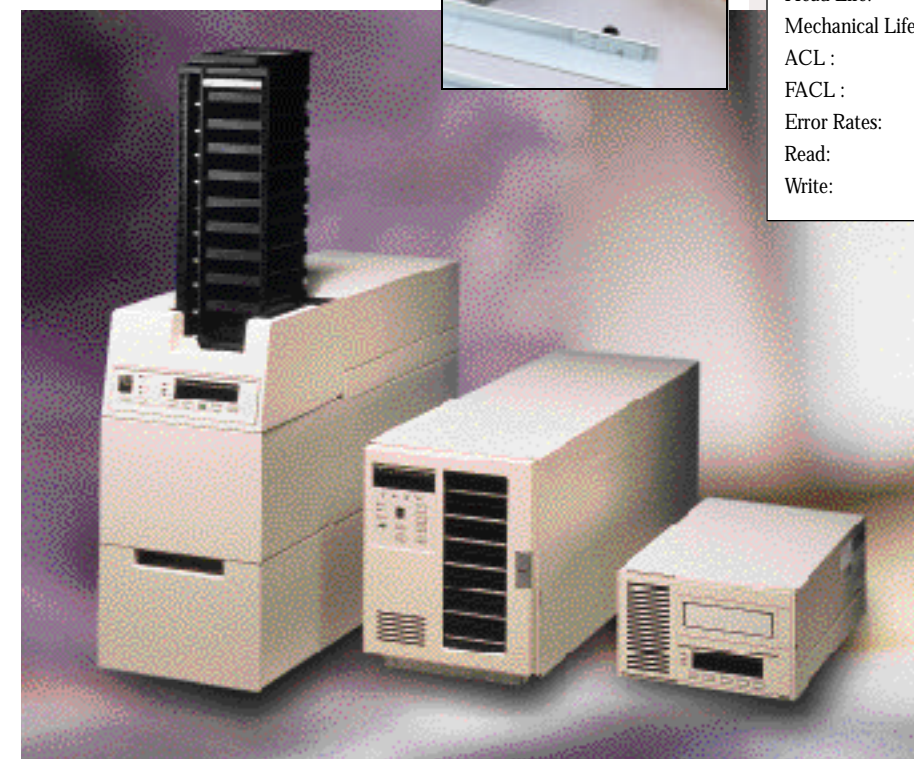
Fujitsu Computer Products of America, Inc. is a wholly owned subsidiary of Fujitsu Limited, one of the world's largest computer companies with \$36 billion in worldwide revenue. Benefiting from Fujitsu Limited's \$3 billion annual investment in research and development, Fujitsu Computer Products provides innovative solutions for the U.S. marketplace. Current product offerings include high-performance hard disk drives, tape drives, magneto-optical drives, high-volume scanners, and printers.



The compact design of the M2488 includes an integrated power supply and simplified tape path for improved performance and reliability

Key Features	
• Full IBM read compatibility (18-Track)	
• Full IBM read/write compatibility (36-Track)	
• Industry accepted 18 track write feature	
• High level of data checking throughout	
• Integrated power supply	
• Downloadable firmware via cartridge, SCSI interface, or RS/232 interface (9-pin DB-9 connector)	
• Seismic Data Feature (optional)	
Drive Performance	
Load/Unload Time:	13 seconds (typical)
Rewind Time:	3 seconds from EOT to BOT
EOT Rewind Time:	55 seconds (typical) standard length tape 100 seconds (typical) double length tape
Access Time:	65 ms
Power-on Time:	40 seconds (nominal)
Options:	Desktop or Rackmount External: Automatic Cartridge Loader (ACL) Flush-mount: Automatic, Cartridge Loader (FACL)

The Interface Personality Module (IPM) can be easily installed and changed to support a variety of SCSI interface options. Simple removal of the foot rails converts to rack mount.



The M2488 includes a wide selection of models and options.

Functional		
Data Transfer Rate:	Host	20 MB/s (burst, synchronous mode, 16 bit) 10 MB/s (burst, synchronous mode, 8 bit)
	Drive/	3.0 MB/s (sustained - uncompressed)
	Controller	9.0 MB/s (sustained - 3:1 compression)
Recording Capacity:		1.2 GB with 545 feet (Single) length tape and EDRC 2.4 GB with 1100 feet (double) length tape and EDRC
Bit Density:		75,742 bpi
Number of Tracks:		36-Track DD-NRZI (18-Track Serpentine)
Compression Algorithm:		Compatible with IDRC Compression (ANSI X3.225-1992)
Typical Compression Ratio:		3:1
Host Interface:		ANSI Standard SCSI-2 (ANSI X3.131-1994)
Drive Interface Options:		SCSI-2, F&W (16 bit) Single-Ended SCSI-2, F&W (16 bit) Differential SCSI-2, F&N (8 bit) Single-Ended SCSI-2, F&N (8 bit) Differential
Data Buffer Capacity:		2 MB (protected by CRC)
Write Retry Buffer:		64KB (maximum) data blocks can be re-written No host intervention required
Tape Speed:		Nominal: 2.0 M/s (78.6 IPS) Search Mode: 4.0 M/s (157.2 IPS)
Noise Level:		Less than 50 dB
Reliability		
Warranty:		2 years
Mean Time to Repair:		Less than 30 minutes (MTTR)
Mean Time Between Failures :		50,000 hours (MTBF)
Head Life:		6,000 hours (50% duty cycle)
Mechanical Life:		loader/threader 200,000 cycles
ACL :		100,000 cycles
FACL :		200,000 cycles
Error Rates:		
Read:		one error block in 10 ¹¹ bytes
Write:		one error block in 10 ⁹ bytes