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Data Sheet

August 15, 2026

CURTISS-WRIGHT / VMETRO / MICRO MEMORY

Curtiss-Wright / VMETRO / Micro Memory MM5425/512M Battery-Backed PCI NVRAM Module

The Curtiss-Wright / VMETRO / Micro Memory MM5425/512M is a battery-backed PCI NVRAM module that preserves critical data during power loss while accelerating I/O performance in systems. Built around 512MB of high-speed SDRAM coupled with redundant on-board lithium-ion batteries, this card replaces slower disk accesses with memory-speed writes - delivering burst transfer rates up to 533 MB/s. The module interfaces via 64-bit / 66MHz PCI 2.2 or PCI-X and operates under direct host control, eliminating the overhead penalty of external storage controllers. This architecture excels in journaling file systems and NFS environments where frequent small writes would otherwise degrade disk performance. EDAC protection maintains data integrity, while specialized Mailbox DMA optimizes both read and write transfers. Battery status registers, software-programmable status LEDs, and automatic failover c



MODEL

**Curtiss-Wright /
VMETRO / Micro
Memory
MM5425/512M**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

MM5425/512M

LISTING

<https://aumictechlabs.com/products/mm5425-512m-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

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Technical Specifications
Capacity: 512MB NVRAM (also available in 256MB, 1GB, 2GB)
Interface: 64-bit / 66MHz PCI 2.2, PCI-X
Memory Technology: SDRAM with Non-Volatile backup
Data Retention: Two on-board redundant lithium-ion batteries
Burst Transfer Rate: Up to 533 MB/s
Error Handling: Error Detection and Correction (EDAC)
Key Features
Specialized Mailbox DMA for maximized read/write throughput
Minimized latency for I/O-intensive workloads
Interrupt support with device drivers across multiple operating systems
Battery status monitoring via CSR (Control and Status Register)
Software-programmable status LEDs
Automatic battery failover circuitry

Typical Applications
File servers and NFS-based storage appliances
Journaling file system metadata logging
data retention during power interruptions
Industrial control, military, and aerospace systems requiring persistent storage
High-frequency synchronous write environments

Compatibility & Integration
Fully host-controlled with PCI 2.2 and PCI-X compatibility. Device drivers available for multiple operating systems. No external storage controller dependency.

MM5425512M Characteristics / Specifications

PARAMETER	VALUE
Model	MM5425/512M
Instrument Type	Battery-backed PCI NVRAM
Host Bus	PCI
Capacity	512 MB
Family	Micro Memory MM-5425
Retention	battery-backed
Form Factor	PCI card
Manufacturer	Micro Memory / VMETRO / Curtiss-Wright
Use Case	non-volatile host memory
Control	PCI memory map
Operating Temperature Class	commercial PCI
Literature	Curtiss-Wright VMETRO MM5425/512M listings
Documentation Type	OEM NVRAM catalog
Brand Lineage	Micro Memory VMETRO Curtiss-Wright
System Role	persistent PCI memory
Power	PCI slot plus battery
Revision	MM5425
Access	memory-mapped NVRAM
Battery	onboard backup battery class
Error Class	parity/ECC class per MM5425 sheet
Calibration Source	OEM published specifications
Export Class	commercial test equipment
Operating temperature	Class: commercial PCI

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: commercial PCI
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Documentation Type	OEM NVRAM catalog
Brand Lineage	Micro Memory VMETRO Curtiss-Wright
System Role	persistent PCI memory
Power	PCI slot plus battery
Revision	MM5425
Access	memory-mapped NVRAM
Battery	onboard backup battery class
Error Class	parity/ECC class per MM5425 sheet
Calibration Source	OEM published specifications
Export Class	commercial test equipment Notes From Curtiss-Wright / VMETRO / Micro Memory MM5425/512M battery-backed PCI NVRAM catalog identity (512 MB). Access time, battery life, and PCI width are on the MM-5425 data sheet.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.