



# Wide SCSI and LVDS VME Disk Modules

High Performance, High Capacity Mass Storage



*These field replaceable modules are perfect for systems requiring self-contained mass storage.*

## Features:

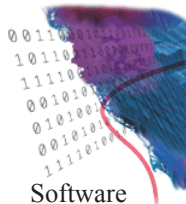
- **Enhanced Shock specifications**  
*(see specifications on back)*
- Electrical bypass of BUSGRANT and IACK signals through integrated backplane
- Selection of DAT and AIT drives from 40 GB to 260 GB (\* 3-slots required)
- Large selection of Ultra 160 and Ultra 320 SCSI hard drives from 36 GB to 147 GB
- Supports majority of VMEbus Single Board Computers
- Two or three VME slots (*6U x 8HP or 12HP x 160mm*) required (DAT, AIT and full size hard drives require 3 slots)
- Choice of two 3.5" Ultra SCSI disks or one hard disk and one DAT/AIT drive

## *Products for Embedded Computing*



CPU's

Embedded Storage



Software

Design & Documentation



Chassis



I/O

**(800) 445-6194 ♦ [www.acttechnico.com](http://www.acttechnico.com)**

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# Specifications

## General

Three configurations are available: one or two 3.5" LVDS Wide SCSI hard drives; one hard and one floppy drive; or one DAT tape and one hard drive mounted in the module. The module is equipped with a front panel with 2 activity LEDs, and ejector handles for easy removal. The DIN connectors are selectively loaded to minimize insertion force.

## Physical

The system disk module is 6U (1U=1.75") high by 8HP or 12HP (1HP=0.20") wide by 160mm deep, which is compatible with VMEbus mechanical and electrical specifications Rev. C.1. Weight: 3 pounds max.

## Performance

Typical Hard Drive Internal Transfer Rate: 32 - 72 Mbits/sec  
 Typical Floppy Drive Transfer Rate: 2MB = 500 Kbits/sec  
 Typical SCSI Transfer Rate: 5 MB/sec Async, 10MB/sec sync

## Input/Output

SCSI I/O is routed through the A and C rows of the P2 connector or an optional front panel mounted SCSI-2 connector. An I/O interconnect ribbon cable (18") is provided.

## Compatibility

These Disk Modules are directly compatible with Motorola® and Force® CPUs. Contact factory for details on adapter modules for other CPUs.

## Reliability

Hard Drive: 800,000 hours MTBF typical  
 DAT Tape Drive: 200,000 hours MTBF typical  
 Floppy Drive: 50,000 hours MTBF typical

## Power Requirements

Worst Case Input Power  
**(DAT/ Hard Drive):** +5V ± 5% @ 1.6A max  
 +12V ± 5% @ 2.3A max

## Hard Drive Parameters

Media (in GB)	36 GB	73 GB	147 GB
Rotational Speed (rpm)	10,025	10,025	10,025
Capacity (formatted)	36,900	73,900	147,800
Average Seek (msec)	4.9	4.9	4.9
Max. Seek (msec)	5.4	5.4	5.4
Avg. Latency (msec)	2.99	2.99	2.99
Internal Data Transfer Rate (MB/s)	74	74	458

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## DAT & AIT Tape Drive Parameters

All tape drives are Ultra SCSI LVDS.

	4 mm DAT 40 GB	8 mm AIT-2 50 GB	8 mm AIT-3 100 GB
Tape Capacity std/compressed	40/80	50/130	100/260
Transfer Rate - Native (MB/sec) Compressed	5.5 MB/sec 2.75 MB/sec	6 MB/sec 15.6 MB/sec	12 MB/sec 31.2 MB/sec
Buffer Memory (MB)	10	10	18
MTBF (hours)	300,000	300,000	300,000

## Environmental

### Temperature

Operating: +5°C to +45°C  
 Non-Operating: -25°C to +60°C

### Humidity

Operating: 20% to 80% RH Wet bulb 26°C  
 Storage: 10% to 90% RH Wet bulb 45°C

### Shock

Operating: 3 G peak acceleration 10 msec  
 Non-Operating: 50 G peak acceleration 10 msec

### Vibration

Operating: 0.5 G peak accel.(5 Hz to 100 Hz)  
 0.25 G peak accel.(100 Hz to 500 Hz)  
 Non-Operating: 2 G peak accel.(5 Hz to 50Hz)

### Altitude

Operating: -200ft to 10,000 feet  
 Non-Operating: -200ft to 50,000 feet

We offer a wide variety of configurations, and drive capacities are always changing. Call 800-445-6194 or visit our website for the most recent information.

[www.acttechnico.com](http://www.acttechnico.com)

## Order Information

Each Disk Module is shipped fully assembled and tested. It may contain one or two drives. Use the following part numbers to design your Hard/Floppy or Hard/DAT Tape Disk Module:

### Hard/Floppy Disk Module:

**TDM2-2F1-xGH2-SC-O**

Hard Drive  
 Specify size from chart

Options  
 2 = Front Panel for SCSI I/O  
 A = AV-ready Hard Disk

### Disk Module with 1 or 2 Hard Drives:

**TDM2-xGH1-xGH2-S-O**

Specify Hard Drives and options using above choices.

### Hard/DAT or AIT Tape Disk Module:

**TDM3-xGDT1-xGH2-S**

DAT or AIT Tape Drive  
 Specify capacity  
 from chart

Hard Drive  
 Specify size  
 from chart