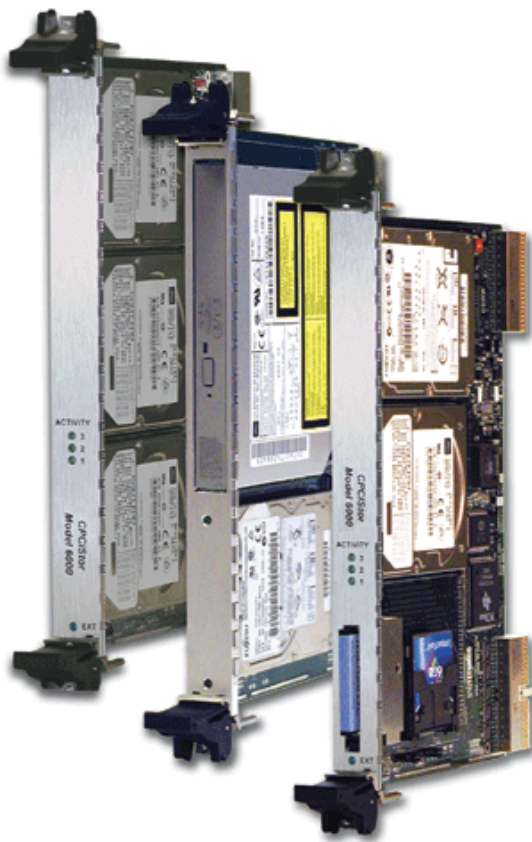


# CPCIStor

CompactPCI Disk Module  
High Performance Mass Storage Plug-In

*These field replaceable modules are designed to support bootstrapping, application load, and data storage in a single 6U CompactPCI slot. They are perfectly suited for communications applications in benign environments as well as applications that require rugged disk drive performance.*



- On-board ATA-4 controller supports hot swap and six different combinations of storage devices:
  - DVD+/-RW drive (others available)
  - 2.5" rotating or solid state flash drives
  - Compact Flash
- Supports board level hot swap removal per PICMG 2.1
- 2.5" rotating drive sizes up to 250 GB (*formatted up to 128 GB*); solid state flash drives up to 128 GB
- 32-bit, 33 MHz CompactPCI interface
- Operating systems supported: Linux, VxWorks, and Windows
- Front panel has activity LEDs and ejector handles for easy removal

## *Products for Embedded Systems*



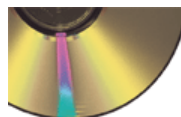
SBCs

PMCs & I/O



Software

Design & Documentation



Chassis



Switches

# Specifications

## General

Each module has an on-board ATA-4 controller, supporting hot swap removal and six different combinations of storage devices. See order information for available versions.

## Physical

The system disk module is 6U high by 4HP (0.8") wide by 160mm deep, compatible with CompactPCI mechanical and electrical specifications. Weight: <2 pounds.

## Input/Output

I/O is routed via the rear through the J5 connector. An I/O interconnect ribbon cable (18") is provided.

## Compatibility

These modules are directly compatible with most CompactPCI SBCs. Contact us for details on modules for other platforms.

## Electrical Specifications

- ATA-4 compliant disk controller uses Silicon Image PCI646 chipset; PCI 2.1 compliant
- Supports PIO Mode 1 - 4, Ultra 33, UDMA-2

## Power Requirements

Worst Case Input Power

**Hard Drive:** +5V ± 5% @ 1A max

**DVD/RW Drive:** +5V ± 5% @ 1.2A avg., 1.6A peak

## Board Environmental Specifications

- DC Input Voltage: 5V ± 5% @ .75A typical
- Operating Temperature: 0°C to 55°C
- Storage Temperature: 0°C to 70°C

## Rotating Hard Drive Parameters

Drive capacities change frequently. Please call or visit our website for the most recent information.

	2.5" Commercial	2.5" Ext. Duty / Temp
<b>Capacity GB (5,400 rpm)</b>	80 / 120 / 160 / 250 **	40 / 60 / 80
<b>Average Seek Time</b>	12 ms	12.5 ms
<b>Average Latency</b>	5.50 ms	5.6 ms
<b>Shock (half sine)</b>		
Operating	N/A	250 Gs @ 2 ms
Storage	N/A	900 Gs @ 2 ms
<b>Vibration (5 to 500 Hz, 0 to peak)</b>		
Operating	1.0 G	1.0 G
Storage	2.0 G	5.0 Gs
<b>Temperature (in °C)</b>		
Operating	+ 5 to + 60	-40 to +70
Non-Operating	-40 to +65	-40 to +90
<b>Humidity (RH non-condensing)</b>		
Operating	8 - 90%	5 - 90%
Storage	5 - 95%	5 - 95%

\*\* Due to controller limitations, formatted capacities above 128 GB are not supported.

## Solid State Flash Drive Parameters

Note: these drives rapidly evolve and improve. Please check with us for the latest performance specifications.

<b>Drive Sizes in GB</b>	8, 16, 24, 32, 64, 128
<b>Media (Read/Write)</b>	Contact us for latest specs
<b>Vibration (min.)</b>	16.3 Gs (20 to 2,000 Hz) on x, y, z axis
<b>Shock (half sine)</b>	1,500 Gs (MIL-STD-810F compliant)
<b>Temperature (in °C)</b>	
Operating	-40 to +85
Non-Operating	-55 to +95
<b>Operating Altitude (max)</b>	80,000 feet

## DVD-RW Drive Parameters

We can supply you with the latest available notebook style DVD drives. Please ask for details when ordering.

<b>Rotational Speed</b>	16X in DVD-ROM mode
<b>Data Transfer Rate</b>	16.6 MB/s, 33.3 burst
<b>Vibration (min.)</b>	
Operating	.2 Gs (5 to 500 Hz) (except in record mode)
Non-Operating	2 Gs (5 to 500 Hz)
<b>Operating Shock (half sine)</b>	
Operating	5 Gs (11ms)
CD-DA Play Mode	2 Gs (11 ms)
<b>Temperature (in °C)</b>	
Operating	0 to +55
Non-Operating	-20 to +65

## CompactFlash Drive Parameters

Industrial CF is currently available in 2, 4, 8, 16 & 32GB. Please check manufacturers for specifications.

## Order Information

Each CPCISstor is shipped fully assembled and tested in six different configurations. Find the version you require and specify drive size(s) using the charts on this page.

**6000-1-nGBy(-ZZ):** 1 DVD+/-RW drive, 1disk drive)

**6000-2-nCF:** 1 DVD+/-RW , 1 CompactFlash drive

**6000-3-nCF-nCF:** 1 DVD+/-RW , 2 CompactFlash drives

**6000-4-nGBy-nGBy-nGBy(-ZZ):** Up to three 2.5" ATA hard drives

**6000-5-nGBy-nGBy(-ZZ)-nCF:** Two 2½" ATA drives, 1 CompactFlash drive

**6000-6-nGBy-nGBy(-ZZ)-nCF-nCF:** Up to two 2½" ATA drives, up to two CF-II (one internal, one front access)

N = capacity for any drive type

y = rotating drive speed (rpm)

2 = 5,400 rpm

4 = Solid State Flash

ZZ = 2½" drive options:

ED = Enhanced Duty

SS = Solid State Comm

If conformal coating is required for salt/spray environments, please add "-C" to the end of the part number.

## Part Number Examples:

**6000-5-32GB4-80GB2-ED-16CF:** One 32GB Solid State Flash drive, one 80GB Enhanced Duty 2½" rotating drive, and one 16GB CF drive.

**6000-1-250GB2:** One DVD+/-RW drive, one 250GB commercial rotating drive

**6000-6-160GB2-160GB2-8CF-16CF:** Two 160GB commercial rotating drives, one 8GB CF and one 16GB CF