

Technical Specifications



Model	PA-16		PA-08	
	U3	FC	U3	FC
RAID Engine	Intel i80303 64bit RISC CPU			
RAID Levels	0, 1, 3, 5 or 0+1			
Cache Support (Write back)	Up to 512Mbytes with ECC 144pins SDRAM Memory			
System Type	Rack mountable			
Host Interface □	Dual Ultra 160 □ SCSI Channels	Dual loops 2Gb Fibre Channels, Standard SFP connectors	Dual Ultra 160 □ SCSI Channels	Dual loops 2Gb Fibre Channels, Standard SFP connectors
Host Transfer □ Rate	160MB / Sec □ per channel	2Gb / Sec per loop	160MB / Sec per channel	2Gb / Sec per loop
Disk Interface	EIDE, ATA - 100			
Disk Channel	Sixteen of UltraDMA100 Disk Channel		Eight of UltraDMA100 Disk Channel	
LCD Display	2 Lines by 16 Characters			
Hot Swap and redundant	Yes (Power Supply, Drive and Fan).			
Hot Spare	Yes (Drive).			
Battery Back-Up Module	Optional, Supporting up to 72hrs battery back-up time (N.A.)			
UART - LAN □	Optional, Windows - Based GUI RAID manager designed for SCSI / FC host based RAID solutions. The OS - independent, cross-platform RAID management allows configuration and status monitoring via standard web browsers or host computers either directly connected to a LAN or WAN.			
FC Hub Adaptor	Optional, Connecting each RAID systems with in - build FC hub adaptors, provides greater extension availability, No need for extra External FC Hub or Switch.			
Array Management Support	Yes.			
Automatic Bad-Sector & Error Recovery	Yes.			
Automatic Drive Rebuilds	Yes. Automatic Data rebuilds.			
Audible Alarm, Pager and Fax Notification	Yes. The Pager and Fax Notification have to connect a external modem.			
Remote Terminal Configuration	Yes. Through RS - 232 emulation terminal.			
Operating Systems	O/S Independent and Transparent			
Power Supply	PA-16: 750+375 watts Redundancy high quality power system, three 375 watts module with PFC function. Load sharing type and cableless design with 700 watts Redundancy high quality power system, two 350 watts module with PFC function. Load sharing type.			
Electrical	AC Voltage 100 - 240 VACac Frequency 47 - 63Hz			
Temperature	Operating Temperature : 5 to 45 degree C. Non Operating Temperature : -40 to 60 degree C.			
Relative Humidity	20% to 80% non-condensing			
Dimensions	446.4 (W) * 499.8 (D) * 3U (H)		445.4 (W) * 546 (D) * 2U (H)	
Weight	28KG		19KG	

*Specification subject to change without notice, all trademarks or registered trademarks are properties of their respective owners.



The effortless inspiration
AXUS Microsystems Inc.

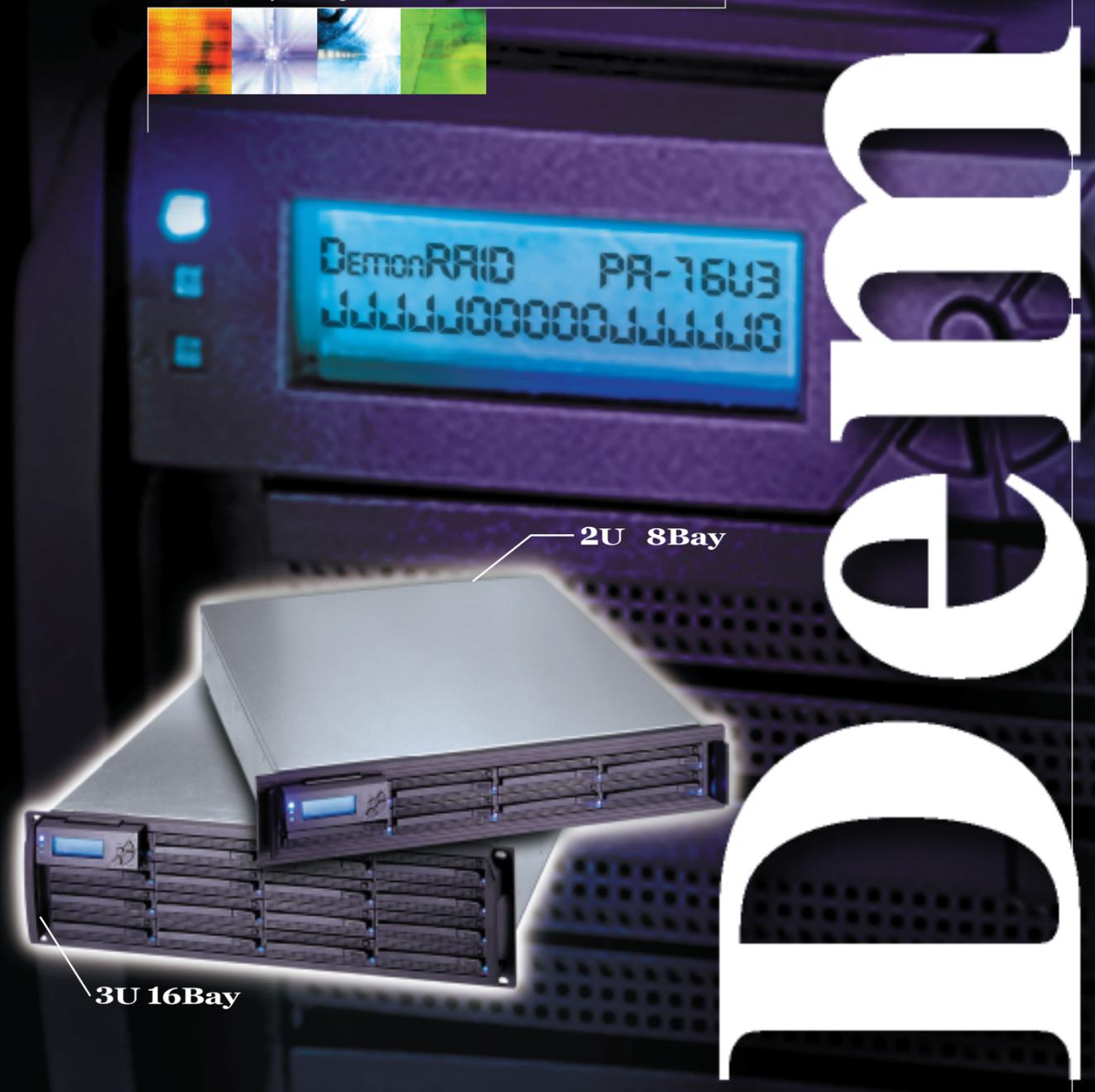
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2U 8Bay P-ATA 3U16Bay P-ATA

SCSI / FC - IDE RIAD System

▶▶ AXUS' DemonRAID P-ATA Series are designed to offer high performance, high reliability, considerable availability, greater capacity and cost less alternative to high cost Fibre to Fibre, Fibre to SCSI and/or SCSI to SCSI RAID subsystems. DemonRAID systems support Fibre Channel host or SCSI interface host connection, and utilize cost-effective IDE drives with simplified storage setup and management process making it ideal for midrange and Enterprise Servers. AXUS RAIDcare storage manager tool enables easy configuration, monitoring your DemonRAID, either locally or remotely. "Critical Event Notification" alerts administrators to system irregularities via E-mail.



DemonRAID

Outstanding Performance

Outstanding Performance

Demon P-ATA RAID uses high performance Intel i80303 64bit RISC processor and intelligent cache system which supports up to 512Mbytes SDRAM for data caching, and to perform simultaneously distribute multiple requests through high speed parallel data transfer, from the host computer to connected EIDE hard drives.

The unique Demon array management firmware utilizes multitasking real-time kernel technology to allow higher efficiency in data transfer.

"Single drive per independent channel" architecture provides high sufficient data throughput per channel and also eliminates overhead disk multitasking in order to increase the data transfer.



High Reliability

Aluminium device carrier for heat dissipation and emissions protection.

Cable-less design, utilizes solid PCB and connectors instead of cables to improve the signal quality and the system reliability.

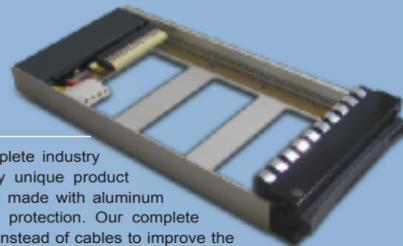
High quality power system, three of full 375 watts capacity power modules which bundle with the PFC function.

Implementing a Micro switch on the carrier to cut off the DC power during hot swapping the disk to protect the IDE signals.

Demon P-ATA supports optional battery back up module to avoid the data loss due to the sudden power-off.

Greater Capacity

Highest Quality Product Design equivalents to a complete industry safety standard to our customers. One of our many unique product advantages is the AXUS device carrier, designed and made with aluminum materials for greater heat dissipation and emissions protection. Our complete Cable-less design, utilizes solid PCB and connectors instead of cables to improve the signal quality and most of all, the system reliability.



Low Cost of Ownership

Supporting Fibre Channel or Ultra-160 SCSI host connection and utilizing the cost-effective IDE drivers which simplify the storage setup process to make a smart choice for many kinds of purpose.

DemonRAID Enhanced Features:

High density slim type enclosure design supports up to 16 drives in 3U height and 8 drives in 2U height enclosure.

■ A Special latch design on AC inlet to protect the AC power cord that may accidentally fall off from the inlet connector.

■ UART to LAN Module provides an TCP/IP based out-band management for your RAID system. UART to LAN connects to the RAID system via a UART port and provides remote management functionalities to the subsystem over the networks via the Ethernet port. It also provides local UART ports for users who need to manage the RAID via the text-mode console.

■ Build-in FC-Hub provides greater extension availability, enables you to set up metropolitan SANs that have separated nodes. Hence, there is no need to buy extra External FC Hub or Switch.

Demon P-ATA supports up to 16 drives, and a maximum capacity of 64 TB.

Demon P-ATA supports On-Line-Expansion function that allows you to add drives to existing array, and re-strip the data across to all the drives.



2U 8Bay

3U 16Bay

Considerable Availability

Advanced algorithms providing RAID levels 0,1,3, 5 or 0+1 option, so you can benefit from either the performance and availability of RAID 0+1 or the capacity and economy of RAID 5.

Redundant power / cooling fan system tolerates a main failure without interrupting service.

Hot swapping of disk drive / cooling fan/power supply. Hot swap design allows easy swap out of faulty parts without loss of service from RAID.

IDE disks in a single disk per channel configuration lower the risk of failure.

Hot spare for stand-by disk drive. When a hard disk drive error occurs on any of the hard drives, this on-line hot spare disk drive will automatically takes over for the failed disk drive, leaving you with hands free support.

Automatic drive failure detecting & Automatic drive online rebuilding enables you to replace the hard drive without having any operations or commands. It transfers data into the replaced hard drives automatically.

Independent Operating Systems. No Matter it is Windows Me / 98, Windows 2000, Windows NT, XP, NOVELL, UNIX or Macintosh are compatible and transparent to our subsystems.



RAID Configuring Management :

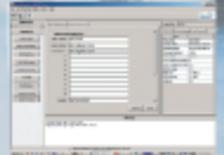
- All the standard functions are included in the Control Panel on Front / Monitor Utility.
- Connecting via RS-232 or LAN port (Host computer to AXUS Demon RAID)
- "Web Access" can be set as "Enable" or "Disable" to control the access right of RAID re-configuring.

RAID health Monitoring :

- Displaying the system information of Demon-RAID.
- Monitoring the status of Physical Hard Drive.
- Reporting the status of Power supply, UPS, Fan and Temperature.
- Connecting via either RS-232 LAN port or SCSI interface.

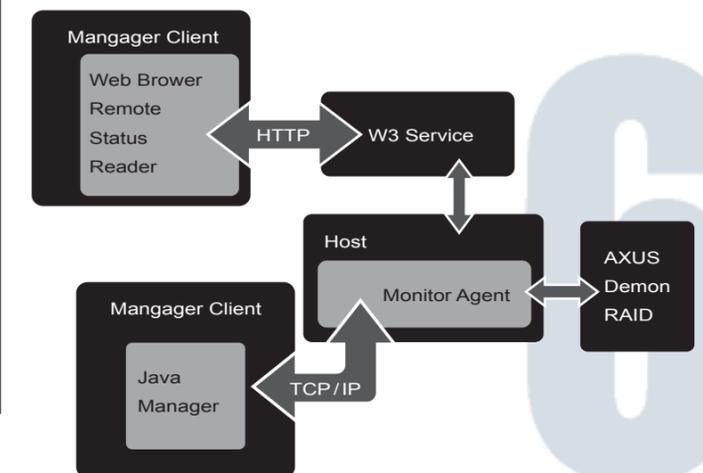
Critical Event Notification :

- Sending the event report by E-mail automatically.
- Supporting up to 10 E-mail address



RAIDCare storage Manager, a user-friendly graphical management tool provides a comfortable interface to configure and monitor the AXUS Demon RAID subsystems from anywhere using standard Web browser via a TCP/IP agent on the Host Computer. This friendly interface not only enables the user to monitor and maintain the Demon RAID, but also provides advanced functionalities such as "Critical event notification" to report the event via E-mail.

There are two major components in the architecture of RAIDCare system, one of them is "Monitor agent", every Host computer connects to the Demon RAID has to install this component to monitor Demon RAID's real-time health status, responding to any abnormal event, and accepting manager's request to reply RAID's information or re-configuring the RAID. Another counterpart is called "Manager Client", "Manager Client can be any PC with TCP/IP communication to Java Manager, is a user interface, which displays the RAID's information and provides user functions to submit commands to re-configure the RAID. We also provide the web interface for managing the RAID.



Outstanding Performance

DemonRAID Enhanced Features: