


YOTTA SPORT B			
RAID Series			
Model Number	YB-24/16/12S3JS3	YB-24S32S3 YB-24S32F4 YB-24S32PE	YI-16SA2U4 YI-16SA2F4
RAID CPU Engine	SAS Expander	Intel IOP341@800Mhz	Intel IOP321@400Mhz
Controller Number	N/A	1 or 2	2
Cache Memory	N/A	Up to 2GB DDR II 533 SDRAM on one DIMM socket with ECC protection per controller	Up to 1GB DDR 266 SDRAM on one DIMM socket with ECC protection per controller
RAID Levels	N/A	0,1,1E,3,5,6,30,50,60 & JBOD	0,1,0+1,3,5,6 & JBOD
RAID Features	The drives in SAS Expanders are part of RAID set with main RAID unit	Multiple RAID selection Instant availability and background initialization Online RAID level / stripe size migration Online Array roaming Online capacity expansion and RAID level migration simultaneously Online volume set expansion S.M.A.R.T. Bad block auto-remapping Hot spare and automatic hot drive rebuild	
Hot Swap Components	Power Supply, FAN, Disk Drive		
System Type	4U / 3U / 2U Rack-Mounts	4U Rack-Mounts	3U Rack-Mounts
Host Interface	Single Mini SAS (SFF - 8088 type) channel	Dual Mini SAS (SFF - 8088 type) or 4Gb FC or Single PCIe x4 channels per controller	Dual Ultra SCSI 320 or 4Gb FC channels per controller
Disk Interface	24 / 16 / 12 SAS / SATA II Disks	24 SAS / SATA II Disks	16 SATA II Disks
JBOD Expansion Port	Dual Mini SAS JBOD Expansion Port can be attached to SAS JBOD to expand capacity.	One Mini SAS JBOD Expansion Port per controller can be attached to SAS JBOD to expand capacity	N/A
Battery Backup Module	N/A	Optional, supporting 72 hours battery backup time	
RAID Management	Managed by RAID controller	Firmware embedded Web browser-based RAID manager via built-in 10/100 Ethernet port Firmware embedded manager via RS-232 port Firmware embedded manager through LCD control panel Field-upgradeable firmware from flash ROM	
Monitors & Notifications	Monitored & notified by RAID controller, JBOD Status LED Indicators	All system status can be monitored via Firmware-embedded Web browser-based RAID manager System status indication through LCD, LED and alarm buzzer All system events can be sent to multiple user via emails alerts SNMP agent already embedded in the firmware allows remote to monitor events through LAN	
Operating System	OS independent and transparent; YOTTA Sport PCIe: O.S. Driver request		
Power Supply	12 bays system: Redundant by dual 375W power modules with PFC feature, loading sharing type and cable-less design 16 bays systems: Redundant by dual 460W power modules with PFC feature, loading sharing type and cable-less design 24 bays systems: Redundant by three 460W power modules with PFC feature, loading sharing type and cable-less design		
Electrical	AC Voltage 110-230 VAC/AC frequency 50-60Hz		
Temperature	Operating temperature: 5-35 degree Celsius / Non-Operating temperature: -40 ~ 60 degree Celsius		
Relative Humidity	20%-80% non-condensing		
Dimension(mm)WxDxH	12 bays system: 446.4 x 545 x 2U / 16 bays system: 446.4 x 520 x 3U / 24 bays system: 446.4 x 562 x 4U		
Weight (kg) (w/o HDD)	12 bays system: 14 / 16 bays system: 22.7 / 24 bays system: 28.7		

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## YOTTA SPORT RAID

Subsystems built by dual independent controllers combining 4Gb FC or PCIe x4 or 3Gb SAS or U320 SCSI host interface with 24/16 affordable, high-capacity SAS/SATA II drives and delivering high performance, enormous capacity. It is ideal for data transaction and throughput intensive applications such as content creation, media editing, video streaming and in the environment where highest levels of performance and reliability are required.

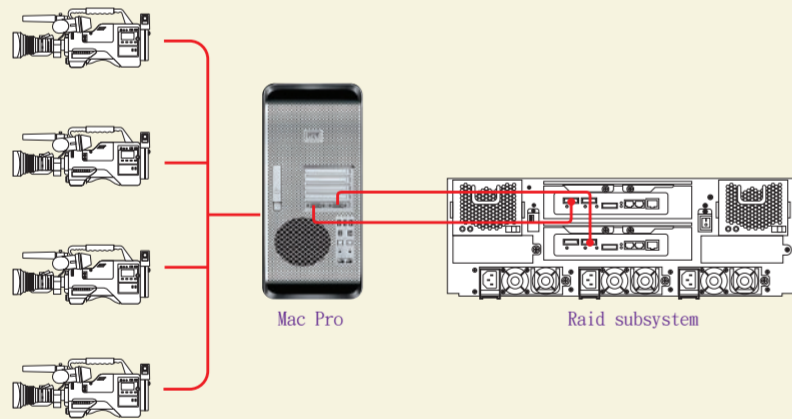


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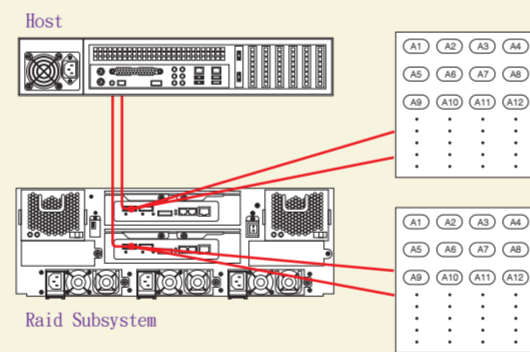
### Maximize your total throughput

To handle the high performance demanding, it is generally a good idea to strip both controllers together with the Operating System. YOTTA SPORT is capable of handling more than 1300MB/s throughput with dual controllers driven by Intel IOP341 processor.



### Super data safe vault

If your data is valuable and losing data is not an option due to disk failure, then YOTTA SPORT will be your best choice. By using the Operating System to mirror both controllers and back up is created within the sub-system.



## Advanced Feature Highlights

### Multiple RAID Selection

A Volume Set is seen by the host system as a single logical device and is organized in a RAID level with one or more physical disks. Additional Volume Sets created in a specified RAID Set will reside on all the physical disks in the RAID set.

### Instant Availability/Background Initialization

RAID 0 and RAID 1 volume set can be utilized immediately after the RAID creation and for RAID 3, 5 and 6 volume sets, the initialization can proceed as a background task. The operation system can instantly access the new volume without rebooting or waiting the initiation to be completed.

### Array Roaming

The configuration settings of a RAID will be stored in both NVRAM and the disk drives, providing the maximum protection in case of a disk drive or controller failure. Array roaming allows the administrators to move a complete RAID set to another system without losing RAID configuration and data.

### Online Capacity Expansion

Online Capacity Expansion makes it possible to add one or more physical drive to a volume set while the server is in operation, eliminating the need to store and restore after reconfiguring the RAID set.

### Online RAID Level and Stripe Size Migration

Both the RAID level and stripe size of an existing volume set can be migrated while the server is online and the volume set is in use. The feature makes the RAID configuration change easier during performance tuning or adding extra physical disks.

### RAID 6

A RAID 6 array is essentially an extension of a RAID 5 array with a second independent distributed parity scheme. RAID 6 provides an extremely high fault tolerance, and can sustain two simultaneous drive failures without downtime or data loss.

### SNMP

SNMP-based management application (also known as a SNMP manager) can monitor the disk array. The firmware-embedded SNMP agent can be used to augment the RAID controller if you are already running an SNMP management application at your site.

### MPIO

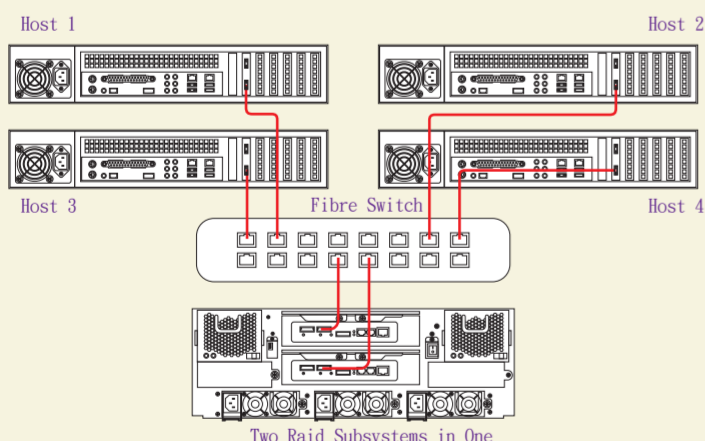
Multipathing solutions are designed to provide failover through the use of redundant physical path components—adapters, cables, and switches—between the server and storage device under Microsoft environments.

### S.M.A.R.T

(Self-Monitoring Analysis and Reporting Technology) is an "early warning system" that the disk manufacturers incorporate logic into their drives. AXUS S.M.A.R.T. function detects and reports status of hard drives, thus enriches the data availability.

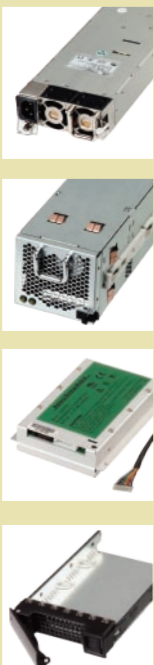
### Two storage sub-systems in one

To increase the number of host connections at a minimum cost, the YOTTA SPORT is ideal for this kind of application. The 24/16 bay YOTTA SPORT, dual controllers, each controller can be used separately to maximize your investment.



## Convenient Modular Design

YOTTA RAID series has a fully Modular design that replaced all the cables with connectors. RAID controller, cooling fans, disk drives, and power supplies can be easily hot swapped to eliminate the down time of the RAID services. The modular design also minimizes headaches should you choose to stick a cold spare part on the shelf for emergencies, all swappable modular are interchangeable between all models within series.

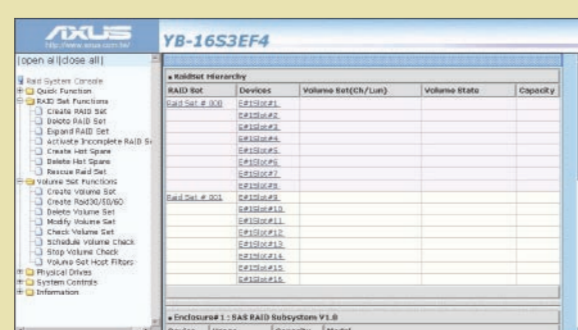


### EZSecure Lock

AXUS disk cartridges come with user-friendly, keyless and secure 2 steps safety measurement design to prevent accidental removal of the hard drives.

## Easy Management

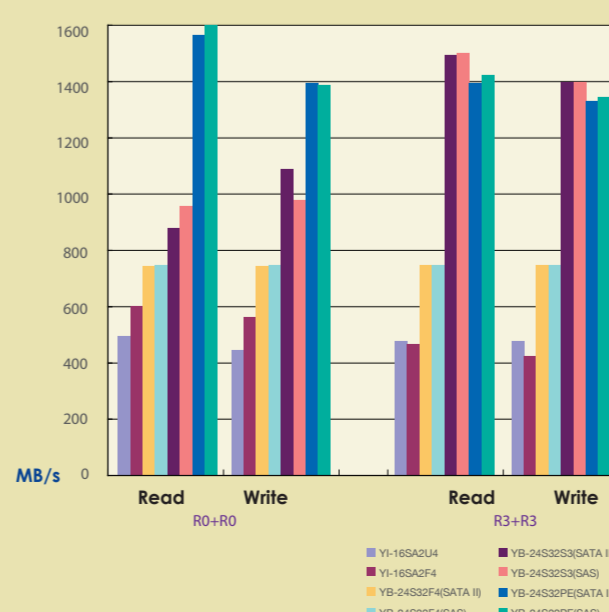
Users can easily configure or maintain the RAID via the RS232 port, LCD control panel, or Web browser-based manager. RAID array configuration, system hardware monitoring, and error alert can be all done at your finger tips.



## Performance Comparison

YOTTA SPORT RAID family provides diverse models that meet the needs of any application with probably best performance/price rates in its class today. The performance's Indicators of AJA and IOMETER for each model are shown below give you an idea which model would be most suitable for your applications. Normally, SAS interface is around 1400MB/s and Fibre interface is around 700MB/s and PCIe interface is around 1400MB/s.

### YOTTA SPORT series throughput per second - I/O Meter Measurement



### YOTTA SPORT series Throughput per second - AJA Measurement

