

# Infortrend

## EonStor® B12S 1U RAID Series

High performance density and flexible scalability for DAS over Multi-lane SAS

for 2.5-inch SFF HDD!





### OVERVIEW

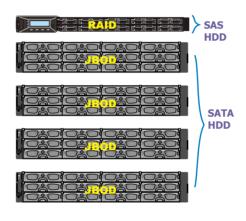
The B12S RAID series is the first 1U-profile RAID system using the latest 2.5" enterprise-class SAS disk drives. The 2.5" drives enable the design of a highly compact RAID enclosure with better transaction rates than its 3.5" counterpart.

Use of 2.5" drives delivers greater performance density, takes up 66% less of rack space, and consumes almost only one third less of power.

The series also supports the option with large capacity SATA drives by attaching 2U or 3U JBOD.

### **Tiered Storage:**

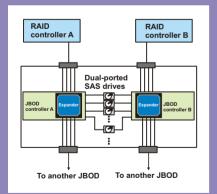
### Mixing SAS / SATA HDD in 2U or 3U JBOD



60 HDD in just 5U space!



# HIGH AVAILABILITY



Utilizing SAS drives' dual-ported connectivity, data paths are routed through redundant expanders and controller modules to ensure the optimal availability of your data.

In addition to path redundancy, all components are designed to withstand harsh environments and strenuous work loads. With the help of intelligent firmware algorithms, the enclosure can be operated with an ease of mind.

#### **HIGHLIGHTS**



#### B12S-R/G1030: Multi-lane SAS to SAS

- High availability dual-active RAID controllers and fault-tolerant hardware
- · Drive interface: 3Gbps 2.5" disk drives
- · Max. scalability: redundant-controller: 1 RAID + 3 JBOD
  - single-controller: 1 RAID + 4 JBOD
- · 5th generation, ASIC400 architecture:
  - Hardware RAID5 + RAID6 engine
  - Dedicated, 18Gbps sync. cache channels
- · EonPath Multi-pathing software
- . SANWatch w/ Snapshot protection
- · RAID and JBOD matching table:

Model	1U JBOD (SAS)	2U JBOD (SATA)	3U JBOD (SATA)	Configuration
B12S-R1030	B12S-J1000-R	S12S-J1002-R	S16S-J1000-R	Dual-controller; fault- tolerant paths
B12S-G1030	B12S-J1000-S	S12S-J1000-G	S16S-J1000-S	Single-controller; single path
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Connections to the 2U S12S-J1000-G and the 3U JBODs require the SFF-8088 to SF-8470 cables.







Models	Controller	Host Ports	Channels	Drive Bays	Scalability
B12S-R1030	Redundant	4 (SFF-8088)	4, multi-lane	12	1 RAID + 3 JBOD (48, SAS HDD / 60, SATA HDD)
B12S-G1030	Single	2 (SFF-8088)	2, multi-lane	12	1 RAID + 4 JBOD (60, SAS HDD / 76, SATA HDD)

#### B12S-R1030



#### B12S-G1030





#### **Subsystem Characteristics**

- · RISC CPU
- ASIC400 RAID engine
- · Up to 2GB cache per controller

· SAS host ports	4 or 2
· LCD keypad panel	1
· BBU (per controller)	1
· Default DDR cache memory (per controller)	512ME
· 10/100 Ethernet port (per controller)	1
· COM ports (per controller)	2
· PSUs	2
· Cooling modules	2

· Diagnostic LEDs on all FRUs

#### **Drive Interface**

No. of disk trays	12
· 3Gbps SAS	
· Drive-side enclosure service	
· SAS multi lane expansion port (per controller)	1

#### **Host Connection Ports**

Data single path bandwidth	SAS: 12Gbps
· Tag command queuing	256

#### **RAID Configurations**

- · RAID levels 0, 1(0+1), 3, 5, 6, 10, 30, 50, 60
- · Up to 32 logical drives (varied by memory size)
- · Up to 1024 LUNs (varied by memory size)
- Multiple array configurations
- · Background rebuild/scan/initialization
- · Infortrend Smart fault management technologies

#### **High Availability**

- · Redundant, hot-swappable FRUs
- · Subsystem self-diagnostics
- · Li-lon battery backup
- · UPS status detection
- · Cluster ready

#### **Management Software**

- · Browser- or Java-based SANWatch software
- · Terminal via RS-232C
- Telnet over Ethernet
- · LCD keypad panel
- Event notification methods:
- · Email/Fax/LAN broadcast/SNMP traps/SMS/MSN

#### **OS Support**

- Microsoft Windows 2000 Server/2003 Server
- Sun Solaris ver. 9/10
- Red Hat Linux ver. 8/9, 64bit, Enterprise ver. 3
- · SuSE: Linux ver. 8/9, 64bit
- Fedora 64bit
- MAC OSX Version 10.4

#### **Approvals**

- BSMI, CB, CE, FCC, UL, cUL, RoHS
- Windows WHQL-Windows Server 2003

#### Requirements

- AC Input: 90-264VAC 380W with PFC
- DC Output: 12V-24A; 5V-30A

#### **Relative Humidity**

- · 5% to 95% non-condensing
- · Operating Temperature: 0°C to 40°C (without BBU) 0°C to 35°C (with BBU)

#### **Dimensions**

- With chassis ears/protrusions: 483mm W x 43.5mm H x 500.6mm D (19 x 1.71 x 19.7 inches)
- · Without chassis ears/protrusions: 444.8mm W x 43.5mm H x 497.8mm D (17.5 x 1.71 x 19.6 inches)

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