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2004 PRODUCT-AT-A-GLANCE

New

A08U-C2410

RAID Controller and Subsystem Specialist since 1992

 27/08/2004

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EonStor Infortrend Tech, Inc. **Advanced Fibre**

Fibre RAID Controller Head and JBODs — Product Details

Model	2510FS-4S/6S	2510FS-4RH/6RH	2510FS-4D/6D	A16F-J1210-G	F16F-R2J2 (Dual SES) F16F-S2J2 (Single SES)
	 *Single-UPG* Fibre-Fibre RAID Controller Head *1	 *Redundant* Fibre-Fibre RAID Controller Head *1	 *Dual-Single* Fibre-Fibre RAID Controller Head *1	 Fibre-SATA JBOD Subsystem 3U 16-Bay *2	 Fibre JBOD Subsystem 3U 16-Bay *2
Form Factor *3	1U Rackmount	1U Rackmount	1U Rackmount	3U Rackmount	3U Rackmount
Drive Channels *6 **Hot Swap Trays**	4 / 6 Channels Fibre 2G *Each channel has two SFP ports* *Each channel module has built-in PBC* *which links the two controllers and two SFP ports in one loop* Every channel can be assigned as Host or Drive Channel mode Dual-loop		4 / 6 Channels Fibre 2G in each Controller, total 8 /12 Channels *Each controller has one SFP port for each channel* Every channel can be assigned as Host or Drive Channel mode Dual-loop	16 Channels 16-bay (SATA Drives) *IDE drives optional*	2 Channels Fibre 2G *Four SFP ports* Dual-Loop 16-bay (2G FC-SCA Drives)
Expansion Channels **Host Channels** *6				2 Channels Fibre 2G *Two SFP Ports per channel,* *total four SFP ports*	
Redundant Controller *1	Single Controller Upgradeable to Redundant	Dual-Controller Redundant Dedicated sync-channels user configurable	Dual-Single controller Two independent RAID controllers	-	JBOD *(No RAID Controller)* With dual SES Module (R2J2) Or single SES Module (S2J2)
RAID Function	RAID 0, 1, (0+1), 3, 5, 10, 30, 50 with Local Spare and Global Spare Drives Multiple RAID Logical Drives (LD), Multiple Logical Volumes (LV), Multiple Partitions, Multiple Host IDs, Multiple Host LUNs, Instant RAID Ready, LD configuration on disks, Dynamic host LUN mappings Each LD/LV > 2TB (Up to 64TB), Automatically Background Rebuild, Automatic Bad Block Reassignment				
Advanced Functions	Host-side redundant path and load balancing supported (3rd party software required in the host computers) WWN LUN filtering, fibre switch support, fabric log-in (supported on fibre-host models), background firmware download Dual-mode RAID expansions: “Add-in Drive” and “Copy & Replace with larger drive” Redundant models: Rolling-firmware-upgrade, auto-sync firmware and configuration on replacement controller				
Management	LCD front panel: *Easy-to-use menu for accessing all functions and features.* RS-232 Terminal: *User friendly menu-driven for accessing all functions and features.* RAIDWatch™ java-based cross-platform central management software *included, providing: Central management, remote / local management (in-band or out-of-band), event notifications (via e-mail, SNMP trap, fax, network broadcast – with full plain-text event message and pager).*				
Management via Built-in LAN	RAIDWatch™-onboard: *Open browser to link to the RAID unit via built-in LAN port.* Telnet-terminal: *Access terminal menu by telnet via built-in LAN port.* Notification-onboard: *RAID unit itself issue e-mail and SNMP traps for event notifications (with full plain-text event messages)*				
Hot Swap Fan Modules	2	2	2	2	2
Hot Swap Power Supplies	2 x 350 W	2 x 350 W	2 x 350 W	2 x 460 W	2 x 460 W
Cache Memory	128 MB – 1 GB (SDRAM)	128 MB – 1 GB (SDRAM)	128 MB – 1 GB (SDRAM)	128 MB (SDRAM)	-
Battery Backup *4	Included x1	Included x2	Included x2	-	-

*1 Single-UPG: Single RAID Controller Upgradeable to Redundant.
Redundant: Dual-Redundant Controller configuration
Redundant with dedicated sync-channels: Use two dedicated Fibre channels as redundant controller communication and cache synchronization for enhanced write-back performance.
Dual-Single: Two RAID controllers both operate individually. No redundant controller functions but performance simply double.

*2 JBOD models require connecting to a RAID controller or RAID subsystem order to benefit the RAID and management functions.
Single-SES: One SES module is installed.
Dual-SES: Two SES modules are installed to provide redundancy on SES module.

*3 For rack mount kits, please see page of “**Rack Mount Guide**”. The ER2510FS range should use the shelf from the rack cabinet manufacturer, or stack on top of the JBOD subsystems.

*4 Battery backup provides power to cache memory when power fails. The unwritten write-back cached data will be kept in the cache memory with power providing from the battery. With one fully charged battery pack used, cached data will be kept for around 72 hours. (Estimated time based on using 512MB SDRAM memory module)
The battery is not able to provide the power for RAID controller or drives to operate when the power fails. Please use UPS (uninterruptible power supply) if it is required for the entire RAID system to work during the power failure.
In redundant controller configuration, the two controllers should have identical cache memory and battery backup configuration.

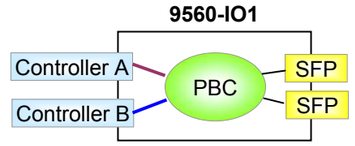
*5 The manuals are provided in PDF format, in the CD included. The Quick Installation Guide provides basic information to get the system to work. All detailed functions and settings please refer to the manual files in the CD. The CD also includes RAIDWatch ™ software for RAID management.

*6 Host-side dual-loop is supported by using host-side software from the OS or 3rd party to provide redundant loop and load balancing functions.
Drive-side dual-loop is supported by RAID controller on all models with Fibre drive side. RAID controller provides redundant path and dynamic load balancing on the drive-side channels. (User configurable on ER2510FS series)

*7 SFP modules are not included. To ensure the signal quality for 2G Fibre, we recommend to use SFP module with LC optical connection.

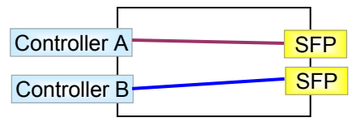
Channel IO Module for ER2510FS:

9560-IO1



With PBC (port-bypass-circuit) built-in which links both controllers and both SFP ports together.

9560-IO2



Straight-through connections with no PBC.

Fibre RAID Controller Head and JBODs — Variants & Spare Parts

Model	2510FS-4S/6S	2510FS-4RH/6RH	2510FS-4D/6D	A16F-J1210-G	F16F-R2J2 (Dual SES) F16F-S2J2 (Single SES)
	 *Single-UPG* Fibre-Fibre RAID Controller Head *1	 *Redundant* Fibre-Fibre RAID Controller Head *1	 *Dual-Single* Fibre-Fibre RAID Controller Head *1	 Fibre-SATA JBOD Subsystem 3U 16-Bay *2	 Fibre JBOD Subsystem 3U 16-Bay *2
Controller Module	9560-CTMod-4 *(INC x1 for -4S)* 9560-CTMod-6 *(INC x1 for -6S)*	9560-CTMod-4 *(INC x2 for -4RH)* 9560-CTMod-6 *(INC x2 for -6RH)*	9560-CTMod-4 *(INC x2 for -4D)* 9560-CTMod-6 *(INC x2 for -6D)*	80AU12JC16 *(INC x1)*	9270FSESM *(INC x2 for -R2J2)* *(INC x1 for -S2J2)*
Fan Module	9560-FanMod *(INC x2)*	9560-FanMod *(INC x2)*	9560-FanMod *(INC x2)*	9270CFanMod *(INC x2)*	9270CFanMod *(INC x2)*
Power Supply Module	9560-PSU *(INC x2)*	9560-PSU *(INC x2)*	9560-PSU *(INC x2)*	9270CPSU *(INC x2)*	9270CPSU *(INC x2)*
Drive Tray	-	-	-	9272CDTray *(INC x16)*	9270FDTray *(INC x16)*
Channel IO Module	9560-IO1 *(INC x4 for -4S)* *(INC x6 for -6S)*	9560-IO1 *(INC x4 for -4RH)* *(INC x6 for -6RH)*	9560-IO2 *(INC x4 for -4D)* *(INC x6 for -6D)*	-	-
RS-232 Cable	9560-Scab *(INC x1)*	9560-Ycab *(INC x2)*	9560-Scab *(INC x1)*	-	-
RS-232 Null Modem	9011 *(INC x1)*	9011 *(INC x1)*	9011 *(INC x1)*	-	-
Fibre SFP *7	96-SFP-JSP21S0AA1 *(OPT)*	96-SFP-JSP21S0AA1 *(OPT)*	96-SFP-JSP21S0AA1 *(OPT)*	96-SFP-JSP21S0AA1 *(OPT)*	96-SFP-JSP21S0AA1 *(OPT)*
Rack Mount Kits *(See Rack Mount Guide) *3*	-	-	-	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*
Cache Memory	128 MB, 256 MB, 512MB and 1GB *(OPT)* Memory Module Not Included	128 MB, 256 MB, 512MB and 1GB *(OPT)* Memory Module Not Included	128 MB, 256 MB, 512MB and 1GB *(OPT)* Memory Module Not Included	128 MB SDRAM *(INC x1)*	-
Battery Backup *4*	9560-IOBT *(INC x1)*	9560-IOBT *(INC x2)*	9560-IOBT *(INC x2)*	-	-
CD, Manual and QIG *5 (Quick Installation Guide)	CD *(INC)*	CD *(INC)*	CD *(INC)*	QIG *(INC)*	QIG *(INC)*
Redundant Ctrl. Upgrade Kit	9560UP4S4RH *(-4S OPT)* 9560UP6S6RH *(-6S OPT)*	Redundant enabled, no upgrade kit required	-	-	-

*1 SC-UPG: Single RAID Controller Upgradeable to Redundant.
Redundant: Dual-Redundant Controller configuration
Redundant with dedicated sync-channels: Use two dedicated Fibre channels as redundant controller communication and cache synchronization for enhanced write-back performance.
Dual-Single: Two RAID controllers both operate individually. No redundant controller functions but performance simply double.

*2 JBOD models require connecting to a RAID controller or RAID subsystem order to benefit the RAID and management functions.
Single-SES: One SES module is installed.
Dual-SES: Two SES modules are installed to provide redundancy on SES module.

*3 For rack mount kits, please see page of "**Rack Mount Guide**".
The ER2510FS range should use the shelf from the rack cabinet manufacturer, or stack on top of the JBOD subsystems.

*4 Battery backup provides power to cache memory when power fails. The unwritten write-back cached data will be kept in the cache memory with power providing from the battery. With one fully charged battery pack used, cached data will be kept for around 72 hours. (Estimated time based on using 512MB SDRAM memory module)
The battery is not able to provide the power for RAID controller or drives to operate when the power fails. Please use UPS (uninterruptible power supply) if it is required for the entire RAID system to work during the power failure.
In redundant controller configuration, the two controllers should have identical cache memory and battery backup configuration.

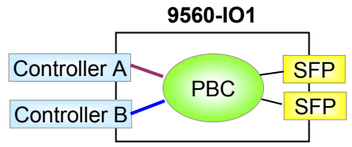
*5 The manuals are provided in PDF format, in the CD included. The Quick Installation Guide provides basic information to get the system to work. All detailed functions and settings please refer to the manual files in the CD. The CD also includes RAIDWatch ™ software for RAID management.

*6 Host-side dual-loop is supported by using host-side software from the OS or 3rd party to provide redundant loop and load balancing functions.

*7 SFP modules are not included. To ensure the signal quality for 2G Fibre, we recommend to use SFP module with LC optical connection.

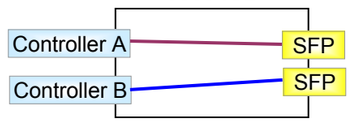
Channel IO Module for ER2510FS:

9560-IO1



With PBC (port-bypass-circuit) built-in which links both controllers and both SFP ports together.

9560-IO2



Straight-through connections with no PBC.

Product Details

Fibre-Fibre RAID Subsystems

Model	F12F-G2A2-M2	F16F-S2A2-M5	F16F-R2A2-M5	F16F-R2A2-AM5	**F16F-R2J2** (Dual SES) **F16F-S2J2** (Single SES)
	 Fibre-Fibre RAID Subsystems 2U 12-Bay	 *Single-UPG* Fibre-Fibre RAID Subsystem *1 3U 16-Bay	 *Redundant* Fibre-Fibre RAID Subsystem *1 3U 16-Bay	 *Redundant* Fibre-Fibre RAID Subsystem with dedicated Sync-Channels *1 3U 16-Bay	 Fibre JBOD Subsystem 3U 16-Bay
Form Factor *3	2U Rackmount	3U Rackmount	3U Rackmount	3U Rackmount	3U Rackmount
Drive Channels *6 **Hot Swap Trays**	2 Channels Fibre 2G *Two SFP ports* Dual-Loop 12-bay (2G FC-SCA Drives)	2 Channels Fibre 2G *Two SFP ports on each channel, total four SFP ports* Dual-Loop 16-bay (2G FC-SCA Drives)	2 Channels Fibre 2G *Two SFP ports on each channel, total four SFP ports* Dual-Loop 16-bay (2G FC-SCA Drives)	2 Channels Fibre 2G *Two SFP ports on each channel, total four SFP ports* Dual-Loop 16-bay (2G FC-SCA Drives)	2 Channels Fibre 2G *Four SFP ports* Dual-Loop 16-bay (2G FC-SCA Drives)
Expansion Channels					
Host Channels *6	2 Channels Fibre 2G *Two SFP ports*	2 Channels Fibre 2G *Two SFP ports*	2 Channels Fibre 2G *Two SFP ports on each controller, total Four SFP ports*	2 Channels Fibre 2G *Two SFP ports on each controller, total four SFP ports*	
Redundant Controller *1	-	Single Controller Upgradeable to Redundant	Dual-Controller Redundant	Dual-Controller Redundant with two dedicated sync-channels	JBOD *(No RAID Controller)* With dual SES Module (R2J2) Or single SES Module (S2J2)
RAID Function	RAID 0, 1, (0+1), 3, 5, 10, 30, 50 with Local Spare and Global Spare Drives Multiple RAID Logical Drives (LD), Multiple Logical Volumes (LV), Multiple Partitions, Multiple Host IDs, Multiple Host LUNs, Instant RAID Ready, LD configuration on disks, Dynamic host LUN mappings Each LD/LV > 2TB (Up to 64TB), Automatically Background Rebuild, Automatic Bad Block Reassignment				
Advanced Functions	Host-side redundant path and load balancing supported (3rd party software required in the host computers) WWN LUN filtering, fibre switch support, fabric log-in (supported on fibre-host models), background firmware download Dual-mode RAID expansions: “Add-in Drive” and “Copy & Replace with larger drive” Redundant models: Rolling-firmware-upgrade, auto-sync firmware and configuration on replacement controller				
Management	LCD front panel: *Easy-to-use menu for accessing all functions and features.* RS-232 Terminal: *User friendly menu-driven for accessing all functions and features.* RAIDWatch™ java-based cross-platform central management software *included, providing: Central management, remote / local management (in-band or out-of-band), event notifications (via e-mail, SNMP trap, fax, network broadcast – with full plain-text event message and pager).*				
Management via Built-in LAN	RAIDWatch™-onboard: *Open browser to link to the RAID unit via built-in LAN port.* Telnet-terminal: *Access terminal menu by telnet via built-in LAN port.* Notification-onboard: *RAID unit itself issue e-mail and SNMP traps for event notifications (with full plain-text event messages)*				
Hot Swap Fan Modules	3	2	2	2	2
Hot Swap Power Supplies	2 x 350 W	2 x 460 W	2 x 460 W	2 x 460 W	2 x 460 W
Cache Memory	256 MB – 1 GB (SDRAM)	512 MB – 1 GB (SDRAM)	512 MB – 1 GB (SDRAM) in Each RAID Controller		-
Battery Backup *4	Optional	Optional	Included x2	Included x2	-

*1 Single-UPG: Single RAID Controller Upgradeable to Redundant.
Redundant: Dual-Redundant Controller configuration
Redundant with dedicated sync-channels: Use two dedicated Fibre channels as redundant controller communication and cache synchronization for enhanced write-back performance.

*2 JBOD models require connecting to a RAID controller or RAID subsystem order to benefit the RAID and management functions.
Single-SES: One SES module is installed.
Dual-SES: Two SES modules are installed to provide redundancy on SES module.

*3 For rack mount kits, please see page of “**Rack Mount Guide**”.

*4 Battery backup provides power to cache memory when power fails. The unwritten write-back cached data will be kept in the cache memory with power providing from the battery. With one fully charged battery pack used, cached data will be kept for around 72 hours. (Estimated time based on using 512MB SDRAM memory module)
The battery is not able to provide the power for RAID controller or drives to operate when the power fails. Please use UPS (uninterruptible power supply) if it is required for the entire RAID system to work during the power failure.
In redundant controller configuration, the two controllers should have identical cache memory and battery backup configuration.

*5 The manuals are provided in PDF format, in the CD included. The Quick Installation Guide provides basic information to get the system to work. All detailed functions and settings please refer to the manual files in the CD. The CD also includes RAIDWatch ™ software for RAID management.

*6 Host-side dual-loop is supported by using host-side software from the OS or 3rd party to provide redundant loop and load balancing functions.
Drive-side dual-loop is supported by RAID controller on all models with Fibre drive side. RAID controller provides redundant path and dynamic load balancing on the drive-side channels. (User configurable on ER2510FS series)

*7 SFP modules are not included. To ensure the signal quality for 2G Fibre, we recommend to use SFP module with LC optical connection.

Fibre-Fibre RAID Subsystems — Variants & Spare Parts

Model	F12F-G2A2-M2	F16F-S2A2-M5	F16F-R2A2-M5	F16F-R2A2-AM5	F16F-R2J2 (Dual SES) F16F-S2J2 (Single SES)
	 Fibre-Fibre RAID Subsystems 2U 12-Bay	 *Single-UPG* Fibre-Fibre RAID Subsystem **1* 3U 16-Bay	 *Redundant* Fibre-Fibre RAID Subsystem **1* 3U 16-Bay	 *Redundant* Fibre-Fibre RAID Subsystem with dedicated Sync-Channels **1* 3U 16-Bay	 Fibre JBOD Subsystem with Dual-SES **2* 3U 16-Bay
Controller Module	9272FCM4 *(INC x1)*	9270FCM4 *(INC x1)*	9270FCM4 *(INC x2)*	9270FCM6 *(INC x2)*	9270FSESM *(INC x2 for -R2J2)* *(INC x1 for -S2J2)*
Fan Module	9272CFanMod *(INC x3)*	9270CFanMod *(INC x2)*	9270CFanMod *(INC x2)*	9270CFanMod *(INC x2)*	9270CFanMod *(INC x2)*
Power Supply Module	9272CPSU *(INC x2)*	9270CPSU *(INC x2)*	9270CPSU *(INC x2)*	9270CPSU *(INC x2)*	9270CPSU *(INC x2)*
Drive Tray	9272CDTray *(INC x12)*	9270FDTray *(INC x16)*	9270FDTray *(INC x16)*	9270FDTray *(INC x16)*	9270FDTray *(INC x16)*
Channel IO Module	-	-	-	-	-
RS-232 Cable	9270ASCab *(INC x1)*	Not included. Standard DB-9 male RS-232 connector, please use standard DB-9 RS-232 cable.			-
RS-232 Null Modem	9011 *(INC x1)*	9011 *(INC x1)*	9011 *(INC x1)*	9011 *(INC x1)*	-
Fibre SFP **7*	96-SFP-JSP21S0AA1 *(OPT)*	96-SFP-JSP21S0AA1 *(OPT)*	96-SFP-JSP21S0AA1 *(OPT)*	96-SFP-JSP21S0AA1 *(OPT)*	96-SFP-JSP21S0AA1 *(OPT)*
Rack Mount Kits *(See Rack Mount Guide)* **3*	9272CSlider28 9272CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*
Cache Memory	256 MB *(INC x1)* 512 MB and 1GB *(OPT)*	512 MB *(INC x1)* 1GB *(OPT)*	512 MB *(INC x2)* 1GB *(OPT)*	512 MB *(INC x2)* 1GB *(OPT)*	-
Battery Backup **4*	9270FBT *(OPT)*	9270FBT *(OPT)*	9270FBT *(INC x2)*	9270FBT *(INC x2)*	-
CD, Manual and QIG **5* (Quick Installation Guide)	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)*
Redundant Ctrl. Upgrade Kit	-	9270FCM4 *(OPT)*	Redundant enabled, no upgrade kit required	Redundant enabled, no upgrade kit required	-

*1 Single-UPG: Single RAID Controller Upgradeable to Redundant.
Redundant: Dual-Redundant Controller configuration
Redundant with dedicated sync-channels: Use two dedicated Fibre channels as redundant controller communication and cache synchronization for enhanced write-back performance.

*2 JBOD models require connecting to a RAID controller or RAID subsystem order to benefit the RAID and management functions.
Single-SES: One SES module is installed.
Dual-SES: Two SES modules are installed to provide redundancy on SES module.

*3 For rack mount kits, please see page of "**Rack Mount Guide**".

*4 Battery backup provides power to cache memory when power fails. The unwritten write-back cached data will be kept in the cache memory with power providing from the battery. With one fully charged battery pack used, cached data will be kept for around 72 hours. (Estimated time based on using 512MB SDRAM memory module)

The battery is not able to provide the power for RAID controller or drives to operate when the power fails. Please use UPS (uninterruptible power supply) if it is required for the entire RAID system to work during the power failure.

In redundant controller configuration, the two controllers should have identical cache memory and battery backup configuration.

*5 The manuals are provided in PDF format, in the CD included. The Quick Installation Guide provides basic information to get the system to work. All detailed functions and settings please refer to the manual files in the CD. The CD also includes RAIDWatch ™ software for RAID management.

*6 Host-side dual-loop is supported by using host-side software from the OS or 3rd party to provide redundant loop and load balancing functions.

*7 SFP modules are not included. To ensure the signal quality for 2G Fibre, we recommend to use SFP module with LC optical connection.

Product Details

Fibre-SATA RAID Subsystems

Model	A08F-G1A2-M1	A12F-G1A2-M1	A16F-G1A2-M1	A16F-R1A2-M2 (Redundant) A16F-S1A2-M2 (Single-UPG)	A16F-R1211-M2 (Redundant) A16F-S1211-M2 (Single-UPG)	A16F-J1210-G
					New 	
	Fibre-SATA RAID Subsystem 2U 8-Bay	Fibre-SATA RAID Subsystem 2U 12-Bay	Fibre-SATA RAID Subsystem 3U 16-Bay	Fibre-SATA RAID Subsystem with drive-side expansion *8 3U 16-Bay	Fibre-SATA RAID Subsystem with drive-side expansion and host-side hub function *8 3U 16-Bay	Fibre-SATA JBOD Subsystem 3U 16-Bay
Form Factor *1	2U Rackmount	2U Rackmount	3U Rackmount	3U Rackmount	3U Rackmount	3U Rackmount
Drive Channels **Hot Swap Trays** *2	8 Channels 8-bay (SATA Drives) *IDE drives optional*	12 Channels 12-bay (SATA Drives) *IDE drives optional*	16 Channels 16-bay (SATA Drives) *IDE drives optional*	16 Channels 16-bay (SATA Drives) *IDE drives optional*	16 Channels 16-bay (SATA Drives) *IDE drives optional*	16 Channels 16-bay (SATA Drives) *IDE drives optional*
Expansions Channels *3	-	-	-	1 Channel Fibre 2G *One SFP port on each controller* *Total two SFP ports (R1A2) or* *One SFP port (S1A2)*	1 Channel Fibre 2G *One SFP port on each controller* *Total two SFP ports (R1211) or* *One SFP port (S1211)*	2 Channels Fibre 2G *Two SFP Ports per channel,* *total four SFP ports*
Host Channels *3 *4	2 Channels Fibre 2G *Two SFP ports*	2 Channels Fibre 2G *Two SFP ports*	2 Channels Fibre 2G *Two SFP ports*	2 Channels Fibre 2G *One SFP ports per channel on each controller* *Total: four SFP ports (R1A2) or* *two SFP ports (S1A2)*	2 Channels Fibre 2G Built-in Fibre hub function *Two SFP ports per channel on each controller* *Total: Eight SFP ports (R1211) or* *Four SFP ports (S1211)*	
Redundant Controller *5	-	-	-	**R1A2**: Dual-controller redundant **S1A2**: Single-controller upgradeable to redundant	**R1211**: Dual-controller redundant **S1211**: Single-controller upgradeable to redundant	-
RAID Function	RAID 0, 1, (0+1), 3, 5, 10, 30, 50 with Local Spare and Global Spare Drives Multiple RAID Logical Drives (LD), Multiple Logical Volumes (LV), Multiple Partitions, Multiple Host IDs, Multiple Host LUNs, Instant RAID Ready, LD configuration on disks, Dynamic host LUN mappings Each LD/LV > 2TB (Up to 64TB), Automatically Background Rebuild, Automatic Bad Block Reassignment					
Advanced Functions	Host-side redundant path and load balancing supported (3rd party software required in the host computers) WWN LUN filtering, fibre switch support, fabric log-in (supported on fibre-host models), background firmware download Dual-mode RAID expansions: “Add-in Drive” and “Copy & Replace with larger drive” Redundant models: Rolling-firmware-upgrade, auto-sync firmware and configuration on replacement controller					
Management	LCD front panel: *Easy-to-use menu for accessing all functions and features.* RS-232 Terminal: *User friendly menu-driven for accessing all functions and features.* RAIDWatch™ java-based cross-platform central management software *included, providing: Central management, remote / local management (in-band or out-of-band), event notifications (via e-mail, SNMP trap, fax, network broadcast – with full plain-text event message and pager).*					
Management via Built-in LAN	RAIDWatch™-onboard: *Open browser to link to the RAID unit via built-in LAN port.* Telnet-terminal: *Access terminal menu by telnet via built-in LAN port.* Notification-onboard: *RAID unit itself issue e-mail and SNMP traps for event notifications (with full plain-text event messages)*					
Hot Swap Fan Modules	2	3	2	2	2	2
Hot Swap Power Supplies	2 x 350 W	2 x 350 W	2 x 460 W	2 x 460 W	2 x 460 W	2 x 460 W
Cache Memory *6	128 MB – 1 GB (SDRAM)	128 MB – 1 GB (SDRAM)	128 MB – 1 GB (SDRAM)	256 MB – 1 GB (SDRAM)	256 MB – 1 GB (SDRAM)	128MB (SDRAM)
Battery Backup *7	-	Optional	Optional	Included (R1A2) Optional (S1A2)	Included (R1211) Included (S1211)	-

*1 For rack mount kits, please see page of “**Rack Mount Guide**”.

*2 IDE drives can be used with optional dongle-boards installed in each drive tray.

*3 SFP modules and Fibre optical cables are not included. To ensure the signal quality for 2G Fibre, we recommend to use SFP module with LC optical connection.

*4 Host-side dual-loop is supported by using host-side software from the OS or 3rd party to provide redundant loop and load balancing functions.

*5 **Single-UPG**: Single Controller Upgradeable to Dual-Redundant Controller configuration.
Redundant: Dual-redundant controller configuration. “Active-active” redundant RAID controller (can be used as “active-passive”)

*6 Supports Infortrend qualified PC-133 ECC SDRAM modules only. Please contact Infortrend for optional memory upgrades.

*7 Battery backup provides power to cache memory when power fails. The unwritten write-back cached data will be kept in the cache memory with power providing from the battery. With one fully charged battery pack used, cached data will be kept for around 72 hours. (Estimated time based on using 512MB SDRAM memory module)
The battery is not able to provide the power for RAID controller or hard drives to operate when the power fails. Please use UPS (uninterruptible power supply) if it is required for the entire RAID system to work during the power failure.

*8 The drive-side expansion port(s) on A16F-R1A2/S1A2/R1211/S1211 can be used to connect Fibre-SATA JBOD subsystems. **Up to 7 units of A16F-J1210-G can be connected.**

The built-in hub function in A16F-S1211 allows two computers connecting to each host channel without using a Fibre switch. (four SFP connections in total)

The built-in hub function in A16F-R1211 provides four SFP connection per host channel without using a Fibre switch. (Eight SFP connections in total)

Fibre-SATA RAID Subsystems — Variants & Spare Parts

Model	A08F-G1A2-M1	A12F-G1A2-M1	A16F-G1A2-M1	A16F-R1A2-M2 (Redundant) A16F-S1A2-M2 (Single-UPG)	A16F-R1211-M2 (Redundant) A16F-S1211-M2 (Single-UPG)	A16F-J1210-G
	 Fibre-SATA RAID Subsystem 2U 8-Bay	 Fibre-SATA RAID Subsystem 2U 12-Bay	 Fibre-SATA RAID Subsystem 3U 16-Bay	 Fibre-SATA RAID Subsystem with drive-side expansion *8 3U 16-Bay	New  Fibre-SATA RAID Subsystem with drive-side expansion and host-side hub function *8 3U 16-Bay	 Fibre-SATA JBOD Subsystem 3U 16-Bay
Controller Module	9272AFGCM08 *(INC x1)*	9272AFGCM12 *(INC x1)*	9270AFGCM *(INC x1)*	9270AFRCM *(R1A2: INC x2; S1A2: INC X1)*	80AF12RC16 *(R1211: INC x2; S1211: INC X1)*	80AU12JC16 *(INC x1)*
Fan Module	9272CFanMod *(INC x2)*	9272CFanMod *(INC x3)*	9270CFanMod *(INC x2)*	9270CFanMod *(INC x2)*	9270CFanMod *(INC x2)*	9270CFanMod *(INC x2)*
Power Supply Module	9272CPSU *(INC x2)*	9272CPSU *(INC x2)*	9270CPSU *(INC x2)*	9270CPSU *(INC x2)*	9270CPSU *(INC x2)*	9270CPSU *(INC x2)*
Drive Tray	9272CDTray *(INC x8)*	9272CDTray *(INC x12)*	9270CDTray *(INC x16)*	9270ADT2S1S *(R1A2: INC x16)* 9270ADT1S1S *(S1A2: INC x16)*	9270ADT2S1S *(R1211: INC x16)* 9270ADT1S1S *(S1211: INC x16)*	9272CDTray *(INC x16)*
Dongle Board for IDE Drive **1*	9270AN1S1P-0011 *(OPT)*	9270AN1S1P-0011 *(OPT)*	9270AN1S1P *(OPT)*	-	-	9270AN1S1P *(OPT)*
RS-232 Cable	9270ASCab *(INC x1)*	9270ASCab *(INC x1)*	9270ASCab *(INC x1)*	9270ASCab *(INC x1)*	9270ASCab *(INC x1)*	-
RS-232 Null Modem	9011 *(INC x1)*	9011 *(INC x1)*	9011 *(INC x1)*	9011 *(INC x1)*	9011 *(INC x1)*	-
Fibre Optical Cable (External) **2*	- *(OPT)*	- *(OPT)*	- *(OPT)*	- *(OPT)*	- *(OPT)*	- *(OPT)*
SFP Module **2*	96-SFP-JSP21S0AA1 *(OPT)*	96-SFP-JSP21S0AA1 *(OPT)*	96-SFP-JSP21S0AA1 *(OPT)*	96-SFP-JSP21S0AA1 *(OPT)*	96-SFP-JSP21S0AA1 *(OPT)*	96-SFP-JSP21S0AA1 *(OPT)*
Rack Mount Kits **3* *(See Rack Mount Guide)*	9272CSlider28 9272CSlider36 *(OPT)*	9272CSlider28 9272CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*
Cache Memory **4*	128 MB SDRAM *(INC x1)* 256 MB, 512 MB and 1GB SDRAM *(OPT)*	128 MB SDRAM *(INC x1)* 256 MB, 512 MB and 1GB SDRAM *(OPT)*	128 MB SDRAM *(INC x1)* 256 MB, 512 MB and 1GB SDRAM *(OPT)*	256 MB SDRAM *(R1A2: INC x2; S1A2: INC X1)* 512 MB and 1GB SDRAM *(OPT)*	256 MB SDRAM *(R1211: INC x2; S1211: INC X1)* 512 MB and 1GB SDRAM *(OPT)*	128 MB SDRAM *(INC x1)*
Battery Backup **5*	-	9270ABT *(OPT)*	9270ABT *(OPT)*	9270ABT *(R1A2: INC x2; S1A2: OPT)*	9270ABT *(R1211: INC x2; S1211: INC x1)*	-
CD, Manual & QIG **6* (Quick Installation Guide)	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)*
Redundant Controller Upgrade Kit **7*	-	-	-	9270AFSUPKIT *(Optional for S1A2 only)*	80AF12RC16-M2 *(x1)* + 9270AN2S1S *(x16)* *(Optional for S1211 only)*	-

*1 IDE drives can be used with optional dongle-boards installed in each drive tray.

*2 SFP modules and Fibre optical cables are not included. To ensure the signal quality for 2G Fibre, we recommend to use SFP module with LC optical connection.

*3 For rack mount kits, please see page of "**Rack Mount Guide**".

*4 Supports Infortrend qualified PC-133 ECC SDRAM modules only. Please contact Infortrend for optional memory upgrades.

*5 Battery backup provides power to cache memory when power fails. The unwritten write-back cached data will be kept in the cache memory with power providing from the battery. With one fully charged battery pack used, cached data will be kept for around 72 hours. (Estimated time based on using 512MB SDRAM memory module)

The battery is not able to provide the power for RAID controller or hard drives to operate when the power fails. Please use UPS (uninterruptible power supply) if it is required for the entire RAID system to work during the power failure.

*6 The manuals are provided in PDF format, in the CD included. The Quick Installation Guide provides basic information to get the system to work. All detailed functions and settings please refer to the manual files in the CD.

The CD also includes RAIDWatch ™ software for RAID management.

*7 **Single-UPG**: Single Controller Upgradeable to Dual-Redundant Controller configuration.

Redundant: Dual-redundant controller configuration. "Active-active" redundant RAID controller (can be used as "active-passive")

*8 The drive-side expansion port(s) on A16F-R1A2/S1A2/R1211/S1211 can be used to connect Fibre-SATA JBOD subsystems. **Up to 7 units of A16F-J1210-G can be connected.**

The built-in hub function in A16F-S1211 allows two computers connecting to each host channel without using a Fibre switch. (four SFP connections in total)

The built-in hub function in A16F-R1211 provides four SFP connection per host channel without using a Fibre switch. (Eight SFP connections in total)

SCSI-SATA RAID Subsystems — Product Details

Model	A08U-C2410-M1	A08U-G1A3-M1	A08U-G1410-M1	A12U-G1A3-M1	A12U-G1410-M1	A16U-G1A3-M1	A16U-G1410-M1
	New  **U320** SCSI-SATA Tower / Desktop RAID 8-Bay	 U160 SCSI-SATA RAID Subsystem 2U 8-Bay	 **U320** SCSI-SATA RAID Subsystem 2U 8-Bay	 U160 SCSI-SATA RAID Subsystem 2U 12-Bay	 **U320** SCSI-SATA RAID Subsystem 2U 12-Bay	 U160 SCSI-SATA RAID Subsystem 3U 16-Bay	 **U320** SCSI-SATA RAID Subsystem 3U 16-Bay
Form Factor *1	Tower / Desktop (Convertible)	2U Rackmount	2U Rackmount	2U Rackmount	2U Rackmount	3U Rackmount	3U Rackmount
Drive Channels Hot Swap Trays *2	8 Channels 8-bay (SATA Drives) *IDE drives optional*	8 Channels 8-bay (SATA Drives) *IDE drives optional*	8 Channels 8-bay (SATA Drives) *IDE drives optional*	12 Channels 12-bay (SATA Drives) *IDE drives optional*	12 Channels 12-bay (SATA Drives) *IDE drives optional*	16 Channels 16-bay (SATA Drives) *IDE drives optional*	16 Channels 16-bay (SATA Drives) *IDE drives optional*
Expansions Channels	-	-	-	-	-	-	-
Host Channels *3	2 Channels SCSI U320 *Four VHDCI ports (in/out ports for each channel)*	2 Channels SCSI U160 *Two VHDCI ports*	2 Channels SCSI U320 *Two VHDCI ports*	2 Channels SCSI U160 *Two VHDCI ports*	2 Channels SCSI U320 *Two VHDCI Ports*	2 Channels SCSI U160 *Two VHDCI ports*	2 Channels SCSI U320 *Two VHDCI Ports*
Redundant Controller *4	-	-	-	-	-	-	-
RAID Function	RAID 0, 1, (0+1), 3, 5, 10, 30, 50 with Local Spare and Global Spare Drives Multiple RAID Logical Drives (LD), Multiple Logical Volumes (LV), Multiple Partitions, Multiple Host IDs, Multiple Host LUNs, Instant RAID Ready, LD configuration on disks, Dynamic host LUN mappings Each LD/LV > 2TB (Up to 64TB), Automatically Background Rebuild, Automatic Bad Block Reassignment						
Advanced Functions	Host-side redundant path and load balancing supported (3rd party software required in the host computers), background firmware download Dual-mode RAID expansions: “Add-in Drive” and “Copy & Replace with larger drive”						
Management	LCD front panel: *Easy-to-use menu for accessing all functions and features.* RS-232 Terminal: *User friendly menu-driven for accessing all functions and features.* RAIDWatch™ java-based cross-platform central management software *included, providing: Central management, remote / local management (in-band or out-of-band), event notifications (via e-mail, SNMP trap, fax, network broadcast – with full plain-text event message and pager).*						
Management via Built-in LAN	RAIDWatch™-onboard: *Open browser to link to the RAID unit via built-in LAN port.* Telnet-terminal: *Access terminal menu by telnet via built-in LAN port.* Notification-onboard: *RAID unit itself issue e-mail and SNMP traps for event notifications (with full plain-text event messages)*						
Hot Swap Fan Modules	2	2	2	3	3	2	2
Hot Swap Power Supplies	2 x 250 W	2 x 350 W	2 x 350 W	2 x 350 W	2 x 350 W	2 x 460 W	2 x 460 W
Cache Memory *5	128 MB – 1 GB (SDRAM)	128 MB – 1 GB (SDRAM)	128 MB – 1 GB (SDRAM)	128 MB – 1 GB (SDRAM)	128 MB – 1 GB (SDRAM)	128 MB – 1 GB (SDRAM)	128 MB – 1 GB (SDRAM)
Battery Backup *6	Optional	-	-	Optional	Optional	Optional	Optional

*1 For rack mount kits, please see page of “**Rack Mount Guide**”.

The A08U-C2410 is a RAID subsystem designed to stand-up vertically as a tower subsystem, or placed horizontally as a desktop subsystem. User can decide to use it as a tower or desktop RAID. The front panel LCD can also easily be changed between vertical and horizontal position accordingly.

*2 IDE drives can be used with optional dongle-boards installed in each drive tray.

*3 Host-side load balancing and redundant path functions are supported by using host-side software from the OS or 3rd party. (not included)

The A08U-C2410 has two U320 SCSI host channels, each host channel has two VHDCI SCSI connector ports (in/out ports). This design provides an easier way of chaining multiple RAID units to the same SCSI bus, with VHDCI-VHDCI external SCSI cable (9270UJBODCab).

*4 All SCSI-SATA RAID subsystems are equipped with single RAID controller. If redundant RAID controller function is required, please choose EonStor™ Fibre-SATA RAID Subsystems.

*5 Supports Infortrend qualified PC-133 ECC SDRAM modules only. Please contact Infortrend for optional memory upgrades.

*6 Battery backup provides power to cache memory when power fails. The unwritten write-back cached data will be kept in the cache memory with power providing from the battery. With one fully charged battery pack used, cached data will be kept for around 72 hours. (Estimated time based on using 512MB SDRAM memory module)

The battery is not able to provide the power for RAID controller or hard drives to operate when the power fails. Please use UPS (uninterruptible power supply) if it is required for the entire RAID system to work during the power failure.

SCSI-SATA RAID Subsystems — Variants & Spare Parts

Model	A08U-C2410-M1	A08U-G1A3-M1	A08U-G1410-M1	A12U-G1A3-M1	A12U-G1410-M1	A16U-G1A3-M1	A16U-G1410-M1
	New  **U320** SCSI-SATA Tower / Desktop RAID 8-Bay	 U160 SCSI-SATA RAID Subsystem 2U 8-Bay	 **U320** SCSI-SATA RAID Subsystem 2U 8-Bay	 U160 SCSI-SATA RAID Subsystem 2U 12-Bay	 **U320** SCSI-SATA RAID Subsystem 2U 12-Bay	 U160 SCSI-SATA RAID Subsystem 3U 16-Bay	 **U320** SCSI-SATA RAID Subsystem 3U 16-Bay
Controller Module	81AU24GC08 *(INC x1)*	9272AUGCM08 *(INC x1)*	82AU14GC08 *(INC x1)*	9272AUGCM12 *(INC x1)*	82AU14GC12 *(INC x1)*	9270AUGCM *(INC x1)*	80AU14GC16 *(INC x1)*
Fan Module	9271CFanMod *(INC x2)*	9272CFanMod *(INC x2)*	9272CFanMod *(INC x2)*	9272CFanMod *(INC x3)*	9272CFanMod *(INC x3)*	9270CFanMod *(INC x2)*	9270CFanMod *(INC x2)*
Power Supply Module	9271CPSU *(INC x2)*	9272CPSU *(INC x2)*	9272CPSU *(INC x2)*	9272CPSU *(INC x2)*	9272CPSU *(INC x2)*	9270CPSU *(INC x2)*	9270CPSU *(INC x2)*
Drive Tray	9273CDTray *(INC x8)*	9272CDTray *(INC x8)*	9272CDTray *(INC x8)*	9272CDTray *(INC x12)*	9272CDTray *(INC x12)*	9270CDTray *(INC x16)*	9270CDTray *(INC x16)*
Dongle Board for IDE Drive **7*	9270AN1S1P-0011 *(OPT)*	9270AN1S1P-0011 *(OPT)*	9270AN1S1P-0011 *(OPT)*	9270AN1S1P-0011 *(OPT)*	9270AN1S1P-0011 *(OPT)*	9270AN1S1P *(OPT)*	9270AN1S1P *(OPT)*
RS-232 Cable	9270ASCab *(INC x1)*	9270ASCab *(INC x1)*	9270ASCab *(INC x1)*	9270ASCab *(INC x1)*	9270ASCab *(INC x1)*	9270ASCab *(INC x1)*	9270ASCab *(INC x1)*
RS-232 Null Modem	9011 *(INC x1)*	9011 *(INC x1)*	9011 *(INC x1)*	9011 *(INC x1)*	9011 *(INC x1)*	9011 *(INC x1)*	9011 *(INC x1)*
SCSI Cable (External) **1*	9270UHstCab *(INC x1)* 9270UJBODCab *(OPT)*	9270UHstCab *(INC x1)* 9270UJBODCab *(OPT)*	9270UHstCab *(INC x1)* 9270UJBODCab *(OPT)*	9270UHstCab *(INC x1)* 9270UJBODCab *(OPT)*	9270UHstCab *(INC x1)* 9270UJBODCab *(OPT)*	9270UHstCab *(INC x1)* 9270UJBODCab *(OPT)*	9270UHstCab *(INC x1)* 9270UJBODCab *(OPT)*
SCSI Terminator (External) **1*	-	-	-	-	-	-	-
Rack Mount Kits **2* *(See Rack Mount Guide)*	-	9272CSlider28 9272CSlider36 *(OPT)*	9272CSlider28 9272CSlider36 *(OPT)*	9272CSlider28 9272CSlider36 *(OPT)*	9272CSlider28 9272CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*
Cache Memory **3*	128 MB SDRAM *(INC x1)* 256 MB, 512 MB and 1GB SDRAM *(OPT)*	128 MB SDRAM *(INC x1)* 256 MB, 512 MB and 1GB SDRAM *(OPT)*	128 MB SDRAM *(INC x1)* 256 MB, 512 MB and 1GB SDRAM *(OPT)*	128 MB SDRAM *(INC x1)* 256 MB, 512 MB and 1GB SDRAM *(OPT)*	128 MB SDRAM *(INC x1)* 256 MB, 512 MB and 1GB SDRAM *(OPT)*	128 MB SDRAM *(INC x1)* 256 MB, 512 MB and 1GB SDRAM *(OPT)*	128 MB SDRAM *(INC x1)* 256 MB, 512 MB and 1GB SDRAM *(OPT)*
Battery Backup **4*	9070E + 9271CBT *(OPT)*	-	-	9270ABT *(OPT)*	9270ABT *(OPT)*	9270ABT *(OPT)*	9270ABT *(OPT)*
CD, Manual & QIG **5* (Quick Installation Guide)	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*
Redundant Controller Upgrade Kit **6*	-	-	-	-	-	-	-

*1 For SCSI-SATA EonStor™ RAID subsystems, one external SCSI cable is included. The subsystem has built-in SCSI terminators, no external SCSI terminator is included (not required).

Optional external SCSI cables: (U160/U320 ready)

9270UHstCab VHDCI-HD68, 1 meter

9270UJBODCab VHDCI-VHDCI, 1 meter

*2 For rack mount kits, please see page of "**Rack Mount Guide**".

The A08U-C2410 comes with four "feet" which can be used for both Tower or Desktop installations.

The A08U-C2410 is a RAID subsystem designed to stand-up vertically as a tower subsystem, or placed horizontally as a desktop subsystem. User can decide to use it as a tower or desktop RAID. The front panel LCD can also easily be changed between vertical and horizontal position accordingly.

*3 Supports Infortrend qualified PC-133 ECC SDRAM modules only. Please contact Infortrend for optional memory upgrades.

*4 Battery backup provides power to cache memory when power fails. The unwritten write-back cached data will be kept in the cache memory with power providing from the battery. With one fully charged battery pack used, cached data will be kept for around 72 hours. (Estimated time based on using 512MB SDRAM memory module)

The battery is not able to provide the power for RAID controller or hard drives to operate when the power fails. Please use UPS (uninterruptible power supply) if it is required for the entire RAID system to work during the power failure.

*5 The manuals are provided in PDF format, in the CD included. The Quick Installation Guide provides basic information to get the system to work. All detailed functions and settings please refer to the manual files in the CD.

The CD also includes RAIDWatch ™ software for RAID management.

*6 All SCSI-SATA RAID subsystems are equipped with single RAID controller. If redundant RAID controller function is required, please choose EonStor™ Fibre-SATA RAID Subsystems.

*7 IDE drives can be used with optional dongle-boards installed in each drive tray.

*8 Host-side load balancing and redundant path functions are supported by using host-side software from the OS or 3rd party. (not included)

SCSI RAID Subsystems — Product Details

Model	U12U-G3A3-M1	U12U-G4010-M1	U16U-G3A3-4M2	U16U-G4010-42	U16U-G3A3-6M2	U16U-G4010-62	U16U-G3J3
	 SCSI-SCSI RAID Subsystem 2U 12-Bay	New  **U320** SCSI-SCSI RAID Subsystem 2U 12-Bay	 SCSI-SCSI RAID Subsystem 3U 16-Bay	New  **U320** SCSI-SCSI RAID Subsystem 3U 16-Bay	 SCSI-SCSI RAID Subsystem with drive-side expansion *2 3U 16-Bay	New  **U320** SCSI-SCSI RAID Subsystem with drive-side expansion *2 3U 16-Bay	 U160/**U320** SCSI JBOD Subsystem *2 3U 16-Bay
Form Factor *1	2U Rackmount	2U Rackmount	3U Rackmount	3U Rackmount	3U Rackmount	3U Rackmount	3U Rackmount
Drive Channels Hot Swap Trays	2 Channels SCSI U160 12-bay (SCSI SCA Drives)	2 Channels SCSI U320 12-bay (SCSI SCA Drives)	2 Channels SCSI U160 16-bay (SCSI SCA Drives)	2 Channels SCSI U320 16-bay (SCSI SCA Drives)	2 Channels SCSI U160 16-bay (SCSI SCA Drives)	2 Channels SCSI U320 16-bay (SCSI SCA Drives)	2 Channels SCSI U160/U320 16-bay (SCSI SCA Drives) *Two VHDCI ports*
Expansion Channels	-	-	-	-	2 Channels SCSI U160 *Two VHDCI ports*	2 Channels SCSI U320 *Two VHDCI ports*	
Host Channels *3	2 Channels SCSI U160 *Two VHDCI ports*	2 Channels SCSI U320 *Two VHDCI ports*	2 Channels SCSI U160 *Two VHDCI ports*	2 Channels SCSI U320 *Two VHDCI ports*	2 Channels SCSI U160 *Two VHDCI ports*	2 Channels SCSI U320 *Two VHDCI ports*	
Redundant Controller	-	-	-	-	-	-	JBOD *2 (No RAID Controller)
RAID Function	RAID 0, 1, (0+1), 3, 5, 10, 30, 50 with Local Spare and Global Spare Drives Multiple RAID Logical Drives (LD), Multiple Logical Volumes (LV), Multiple Partitions, Multiple Host IDs, Multiple Host LUNs, Instant RAID Ready, LD configuration on disks, Dynamic host LUN mappings Each LD/LV > 2TB (Up to 64TB), Automatically Background Rebuild, Automatic Bad Block Reassignment						
Advanced Functions	Host-side redundant path and load balancing supported (3rd party software required in the host computers) WWN LUN filtering, fibre switch support, fabric log-in (supported on fibre-host models), background firmware download Dual-mode RAID expansions: “Add-in Drive” and “Copy & Replace with larger drive” Redundant models: Rolling-firmware-upgrade, auto-sync firmware and configuration on replacement controller						
Management	LCD front panel: *Easy-to-use menu for accessing all functions and features.* RS-232 Terminal: *User friendly menu-driven for accessing all functions and features.* RAIDWatch™ java-based cross-platform central management software *included, providing: Central management, remote / local management (in-band or out-of-band), event notifications (via e-mail, SNMP trap, fax, network broadcast – with full plain-text event message and pager).*						
Mgmt. via Built-in LAN	RAIDWatch™-onboard: *Open browser to link to the RAID unit via built-in LAN port.* Telnet-terminal: *Access terminal menu by telnet via built-in LAN port.* Notification-onboard: *RAID unit itself issue e-mail and SNMP traps for event notifications (with full plain-text event messages)*						
Hot Swap Fan Modules	3	3	2	2	2	2	2
Hot Swap Power Supplies	2 x 350 W	2 x 350 W	2 x 460 W	2 x 460 W	2 x 460 W	2 x 460 W	2 x 460 W
Cache Memory	128 MB – 1 GB (SDRAM)	128 MB – 1 GB (SDRAM)	256 MB – 1 GB (SDRAM)	256 MB – 1 GB (SDRAM)	256 MB – 1 GB (SDRAM)	256 MB – 1 GB (SDRAM)	-
Battery Backup *4	Optional	Optional	Optional	Optional	Optional	Optional	-

*1 For rack mount kits, please see page of “**Rack Mount Guide**”.

*2 JBOD (Just-a-Bunch-Of-Disks) subsystem requires connecting to a RAID subsystem (or RAID controller) in order to benefit the RAID and management functions.

The U16U-G3J3 SCSI JBOD is compliant with U160 / U320 SCSI, either U160 or U320 SCSI disks can be used. The U16U-G3J3 is designed to be used with U16U-G3A3-6M2 and U16U-G4010-62.

*3 Host-side load balancing and redundant path functions are supported by using host-side software from the OS or 3rd party. (not included)

*4 Battery backup provides power to cache memory when power fails. The unwritten write-back cached data will be kept in the cache memory with power providing from the battery. With one fully charged battery pack used, cached data will be kept for around 72 hours. (Estimated time based on using 512MB SDRAM memory module)

The battery is not able to provide the power for RAID controller or drives to operate when the power fails. Please use UPS (uninterruptible power supply) if it is required for the entire RAID system to work during the power failure.

For U16U and U12U series: A battery charger board (9070E) is required for U16U and U12U series, when battery backup option is taken. The battery module (9270UBT) requires the charger board (9070E) in order to recharge the battery.

SCSI RAID Subsystems — Variants & Spare Parts

Model	U12U-G3A3-M1	U12U-G4010-M1	U16U-G3A3-4M2	U16U-G4010-42	U16U-G3A3-6M2	U16U-G4010-62	U16U-G3J3
		New 		New 		New 	
	SCSI-SCSI RAID Subsystem 2U 12-Bay	**U320** SCSI-SCSI RAID Subsystem 2U 12-Bay	SCSI-SCSI RAID Subsystem 3U 16-Bay	**U320** SCSI-SCSI RAID Subsystem 3U 16-Bay	SCSI-SCSI RAID Subsystem with drive-side expansion *2 3U 16-Bay	**U320** SCSI-SCSI RAID Subsystem with drive-side expansion *2 3U 16-Bay	SCSI JBOD Subsystem *2 3U 16-Bay
Controller Module	9272UCM4 *(INC x1)*	82U40GC4 *(INC x 1)*	9270UCM4 *(INC x1)*	80U40GC4 *(INC x1)*	9270UCM6 *(INC x1)*	80U40GC6 *(INC x1)*	-
Fan Module	9272CFanMod *(INC x3)*	9272CFanMod *(INC x3)*	9270CFanMod *(INC x2)*	9270CFanMod *(INC x2)*	9270CFanMod *(INC x2)*	9270CFanMod *(INC x2)*	9270CFanMod *(INC x2)*
Power Supply Module	9272CPSU *(INC x2)*	9272CPSU *(INC x2)*	9270CPSU *(INC x2)*	9270CPSU *(INC x2)*	9270CPSU *(INC x2)*	9270CPSU *(INC x2)*	9270CPSU *(INC x2)*
Drive Tray	9272CDTray *(INC x12)*	9272CDTray *(INC x12)*	9270CDTray *(INC x16)*	9270CDTray *(INC x16)*	9270CDTray *(INC x16)*	9270CDTray *(INC x16)*	9270CDTray *(INC x16)*
RS-232 Cable	9270ASCab *(INC x1)*	9270ASCab *(INC x1)*	Not included. Standard DB-9 male RS-232 connector, please use standard DB-9 RS-232 cable.				-
RS-232 Null Modem	9011 *(INC x1)*	9011 *(INC x1)*	9011 *(INC x1)*	9011 *(INC x1)*	9011 *(INC x1)*	9011 *(INC x1)*	-
SCSI Cable (External) **1*	9270UHstCab *(INC x1)*	9270UHstCab *(INC x1)*	9270UHstCab *(INC x1)*	9270UHstCab *(INC x1)*	9270UHstCab *(INC x1)*	9270UHstCab *(INC x1)*	9270UJBODCab *(INC x1)*
SCSI Terminator (External) **1*	-	-	-	-	-	-	-
Rack Mount Kits **3* *(See Rack Mount Guide)*	9272CSlider28 9272CSlider36 *(OPT)*	9272CSlider28 9272CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*	9270CEncBrk 9270CSlider32 9270CSlider36 *(OPT)*
Cache Memory	128 MB *(INC x1)* 256 MB, 512 MB and 1GB *(OPT)*	128 MB *(INC x1)* 256 MB, 512 MB and 1GB *(OPT)*	256 MB *(INC x1)* 512 MB and 1GB *(OPT)*	256 MB *(INC x1)* 512 MB and 1GB *(OPT)*	256 MB *(INC x1)* 512 MB and 1GB *(OPT)*	256 MB *(INC x1)* 512 MB and 1GB *(OPT)*	-
Battery Backup **4*	9070E + 9270UBT *(OPT)*	9070E + 9270UBT *(OPT)*	9070E + 9270UBT *(OPT)*	9070E + 9270UBT *(OPT)*	9070E + 9270UBT *(OPT)*	9070E + 9270UBT *(OPT)*	-
CD, Manual and QIG **5* (Quick Installation Guide)	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)* CD *(INC)*	QIG *(INC)*

*1 For SCSI-SCSI EonStor™ RAID subsystems, an external SCSI cable – 9270UHstCab is included (VHDCI-HD68, 1 meter length)

For SCSI JBOD subsystem (U16U-G3J3), an external SCSI cable – 9270UJBODCab is included (VHDCI-VHDCI, 1 meter length).

In order to connect U16U-G3J3 to U16U-G3A3-6M2, two 9270JBODCab are required. (one is included)

The EonStor systems has built-in SCSI terminators, no external SCSI terminator is included (not required).

Optional external SCSI cables: (U160/U320 ready)

9270UHstCab VHDCI-HD68, 1 meter

9270UJBODCab VHDCI-VHDCI, 1 meter

*2 JBOD models require connecting to a RAID controller or RAID subsystem order to benefit the RAID and management functions.

*3 For rack mount kits, please see page of "**Rack Mount Guide**".

*4 Battery backup provides power to cache memory when power fails. The unwritten write-back cached data will be kept in the cache memory with power providing from the battery. With one fully charged battery pack used, cached data will be kept for around 72 hours. (Estimated time based on using 512MB SDRAM memory module)

The battery is not able to provide the power for RAID controller or drives to operate when the power fails. Please use UPS (uninterruptible power supply) if it is required for the entire RAID system to work during the power failure.

In redundant controller configuration, the two controllers should have identical cache memory and battery backup configuration.

For U16U and U12U series: A battery charger board (9070E) is required for U16U and U12U series, when battery backup option is taken. The battery module (9270UBT) requires the charger board (9070E) in order to recharge the battery.

*5 The manuals are provided in PDF format, in the CD included. The Quick Installation Guide provides basic information to get the system to work. All detailed functions and settings please refer to the manual files in the CD.

The CD also includes RAIDWatch ™ software for RAID management.

SCSI-SCSI, Fibre-SCSI RAID Controllers – SentinelRAID™ — Product Details and Options

Model	SR150F	SR170	SR1500F	SR2500F	SR2700	SR2500FR1
		New 			New 	
	SCSI-SCSI RAID Controller	**U320** SCSI-SCSI RAID Controller	Fibre-SCSI / SCSI-SCSI RAID Controller	Fibre-SCSI / SCSI-SCSI RAID Controller	**U320** SCSI-SCSI / Fibre-SCSI RAID Controller	SCSI-SCSI Redundant RAID Controller
Form Factor	5.25” Half Height	5.25” Half Height	5.25” Half Height	5.25” Half Height	5.25” Half Height	5.25” Full Height
Base Channels *2	4 Channels SCSI U160 *Four standard 68-pin high-density connectors*	4 Channels SCSI U320 *Four standard 68-pin high-density connectors*	2 Channels SCSI U160 *Two standard 68-pin high-density connectors*	4 Channels SCSI U160 *Four standard 68-pin high-density connectors*	4 Channels SCSI U320 *Four standard 68-pin high-density connectors*	3 Channels SCSI U160 *Three standard 68-pin high-density connectors*
Add-on Channels (Optional Daughter Board) *2	4 Channels SCSI U160 *Four standard 68-pin high-density connectors (9284FU3A)*	4 Channels SCSI U320 *Four standard 68-pin high-density connectors (9284U4A)*	4 Channels SCSI U160 *Four standard 68-pin high-density connectors (9284FU3 + 9288FB4 + 9515)*	4 Channels SCSI U160 *Four standard 68-pin high-density connectors (9284FU3 + 9288FB4 + 9515)*	4 Channels SCSI U320 *Four standard 68-pin high-density connectors (9284U4 + 9288FB4 + 9515)*	-
			OR	***OR***	***OR***	
			2 Channels Fibre 2G *Two optical LC connectors (9282FF2 + 9288FB2F2)* *5	2 Channels Fibre 2G *Two optical LC connectors (9282FF2 + 9288FB2F2)* *5	2 Channels Fibre 2G *Two optical LC connectors (9282FF2 + 9288FB2F2)* *5	
Redundant Controller	Supported *Requires connections with another SR150F (9535)*	-	Supported *Requires connections with another SR1500F (9535)*	Supported *Requires connections with another SR2500F (9535)*	-	Supported *Two integrated controller modules built-in (top-bottom)* No additional controller required
Hot-Swap Controller Docking Connectors *3	-	-	Yes	Yes	Yes	Yes
RAID Function	RAID 0, 1, (0+1), 3, 5, 10, 30, 50 with Local Spare and Global Spare Drives Multiple RAID Logical Drives (LD), Multiple Logical Volumes (LV), Multiple Partitions, Multiple Host IDs, Multiple Host LUNs, LD configuration on disks, Dynamic host LUN mappings Automatically Background Rebuild, Automatic Bad Block Reassignment					
Advanced Functions	Host-side redundant path and load balancing supported (3rd party software required in the host computers), WWN LUN filtering, fibre switch support, fabric log-in (supported on fibre-host models), background firmware download Dual-mode RAID expansions: “Add-in Drive” and “Copy & Replace with larger drive” Redundant models: Rolling-firmware-upgrade, auto-sync firmware and configuration on replacement controller					
Management	LCD front panel: *Easy-to-use menu for accessing all functions and features.* RS-232 Terminal: *User friendly menu-driven for accessing all functions and features.* RAIDWatch™ java-based cross-platform central management software *included, providing: Central management, remote / local management (in-band or out-of-band), event notifications (via e-mail, SNMP trap, fax, network broadcast – with full plain-text event message and pager).*					
Management via Built-in LAN Port	-	RAIDWatch™-onboard: *Open browser to link to the RAID unit via built-in LAN port.* Telnet-terminal: *Access terminal menu by telnet via built-in LAN port.* Notification-onboard: *RAID unit itself issue e-mail and SNMP traps for event notifications (with full plain-text event messages)*				-
Cache Memory	128 MB, 256 MB, 512 MB and 1GB SDRAM (Not Included)					
Battery Backup *4	Optional *(Battery charger board and first battery pack: 9070D + 9010D; second battery pack: 9010D; battery extension cable 9519D)*					

*1 SR2500FR5 and SR2500FR6 can be fit into a 1U rackmount enclosure. SR2500FR5 and SR2500FR6 do not include power supply or rackmount enclosure/chassis.

*2 All channels (base channels and additional channels) can be configured as Host channel or Drive channel by user.

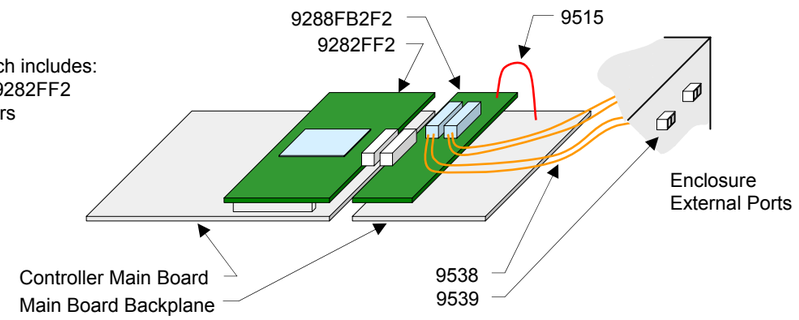
*3 Hot-Swap Controller Docking Connectors provide the ease of controller maintenance – removing the controller board without the need of opening the enclosure or disconnecting any SCSI/Fibre/power/RS-232 cables.
The hot-swap drive is supported on all SentinelRAID controllers. (which is not related to the controller docking connectors)

*4 Battery backup provides power to cache memory when power fails. The unwritten write-back cached data will be kept in the cache memory with power providing from the battery. With one fully charged battery pack (9010D) used, cached data will be kept for 72 hours.
A second battery (9010D) can be connected (connecting to the first battery pack) for longer. The battery extension cable (9519D) can be used in between the battery pack and RAID controller, when the location of the battery cannot be close to the RAID controller in the enclosure.
The battery is not able to provide the power for RAID controller or drives to operate when the power fails. Please use UPS (uninterruptible power supply) if it is required for the entire RAID system to work during the power failure.

*5 9282FF2: 2 Channel 2G FC Daughter Board
9288FB2F2: The backplane for 9282FF2

The 9288FB2F2 is now available as a kit, which includes:

9282FB2F2	daughter board backplane for 9282FF2
9538	2G FC optical-LC cables, 2 pairs
9539	LC duplex adapters, 2 pcs
9515	5V auxiliary cable



Rack Mount Guide

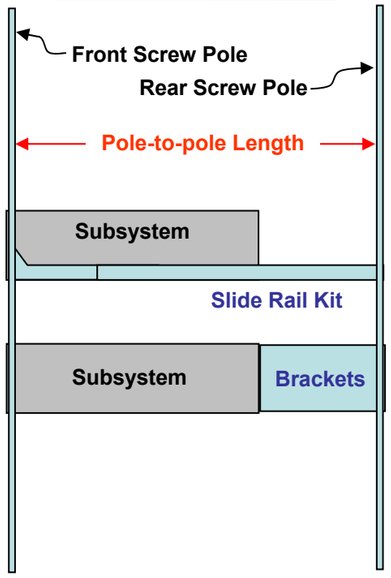
Rack Mount Kits for Rack Mount Subsystems

Model		9272CSlider28	9272CSlider36	9270CEncBrk	9270CSlider32	9270CSlider36
		 Slide Rail Kit	 Slide Rail Kit	 Brackets	 Slide Rail Kit	 Slide Rail Kit
	EonRAID™ 2510FS Fibre Controller Head *1*	-	-	-	-	-
	EonStor™ 2U 8-Bay A08U / A08F	☑	☑	-	-	-
	EonStor™ 2U 12-Bay A12U / A12F / U12U / F12F	☑	☑	-	-	-
	EonStor™ 3U 16-Bay A16U / A16F / U16U / F16F	-	-	☑	☑	☑
Minimum Length (Pole-to-pole) *2		533 mm (20.98 inches)	647 mm (25.47 inches)	647 mm (25.47 inches)	609 mm (24 inches)	600 mm (23.62 inches)
Maximum Length (Pole-to-pole) *2		724 mm (28.50 inches)	914 mm (35.98 inches)	731 mm (28.77 inches)	812 mm (32 inches)	910 mm (35.82 inches)

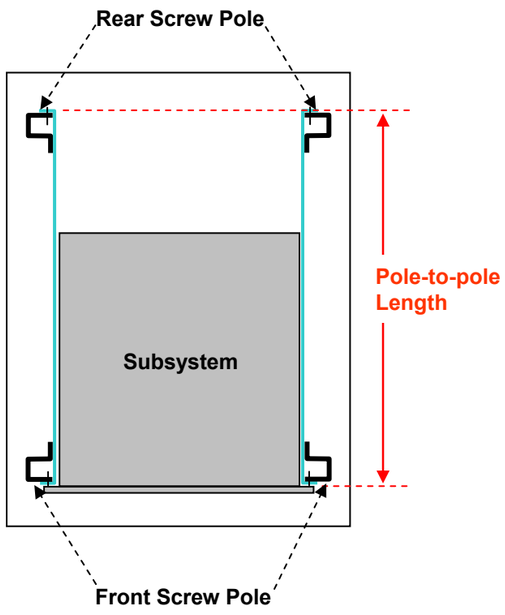
*1 The ER2510FS range should use the shelf from the rack cabinet manufacturer, or stack on top of the JBOD subsystems.

*2 The “pole-to-pole” length is referring to the distance between the front screw hole pole (post) to the rear screw hole pole (post) in a rack cabin. A typical 900mm rack cabin often has pole-to-pole length of around 670 mm, and 800mm rack has around 615 mm.

Side View of Rack Cabin



Top View of Rack Cabin

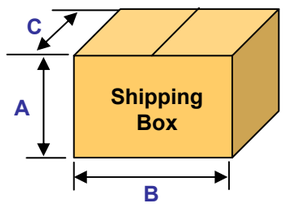


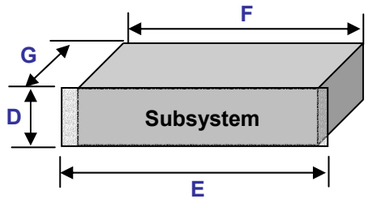
	Shipping Dimensions & Weights					Subsystem Dimensions & Weights					
	A	B	C	W1 *3*	W2 *3*	D	E	F	G *4*	W3 *	W4 *
ER2510FS **1U Head**	360 mm *14.17 ”*	625 mm *24.60 ”*	720 mm *28.34 “*	19.5 kg *42.95 lbs*		44 mm *1.73 “*	482 mm *19.00 “*	426 mm *16.77 “*	470 mm *18.50 “*	17.5 kg *38.54 lbs*	
EonStor™ **2U 8-Bay**	344 mm *13.54 ”*	600 mm *23.62”*	670 mm *26.37 “*	23.5 kg *51.76 lbs*	29.5 kg *64.97 lbs*	88 mm *3.46 “*	482 mm *19.00 “*	446 mm *17.55 “*	490 mm *19.29 “*	16.0 kg *35.24 lbs*	22.0 kg *48.45 lbs*
EonStor™ **2U 12-Bay**	344 mm *13.54 ”*	600 mm *23.62 ”*	670 mm *26.37 “*	25.5 kg *56.16 lbs*	34.5 kg *75.99 lbs*	88 mm *3.46 “*	482 mm *19.00 “*	446 mm *17.55 “*	490 mm *19.29 “*	18.0 kg *39.64 lbs*	27.0 kg *59.47 lbs*
EonStor™ **3U 16-Bay**	480 mm *18.89 ”*	600 mm *23.62 “*	700 mm *27.55 “*	34.5 kg *75.99 lbs*	46.5 kg *102.42 lbs*	132 mm *5.19 “*	482 mm *19.00 “*	450 mm *17.71 “*	500 mm *19.68 “*	18.0 kg *39.64 lbs*	30.0 kg *66.07 lbs*
EonStor™ **A08U-C2410**	450 mm *17.71 ”*	510 mm *20.07 ”*	610 mm *24.01 “*	21.0 kg *42.65 lbs*	34.5 kg *60.57 lbs*	155 mm *6.10 “* 382 mm *15.03 “*	167 mm *6.57 “* 235 mm *9.25 “*	375 mm *14.76 “* 155 mm *6.10 “*	370 mm *14.56 “* 370 mm *14.56 “*	11.50 kg *25.33 lbs*	17.0 kg *37.44 lbs*

*3 All weight information are estimated numbers as an example.
The actual weight can vary with different drive models and configurations.

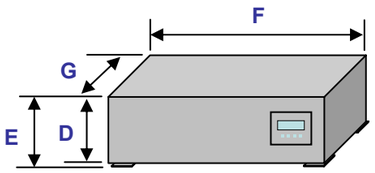
*4 Please allow additional 5 cm at the back of the subsystem for the cabling.

W1 = Shipping weight without drives
W2 = Shipping weight with drives
W3 = Subsystem weight without drives
W4 = Subsystem weight with drives

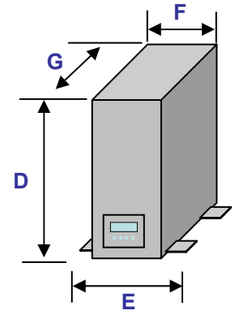




Rackmount Subsystems



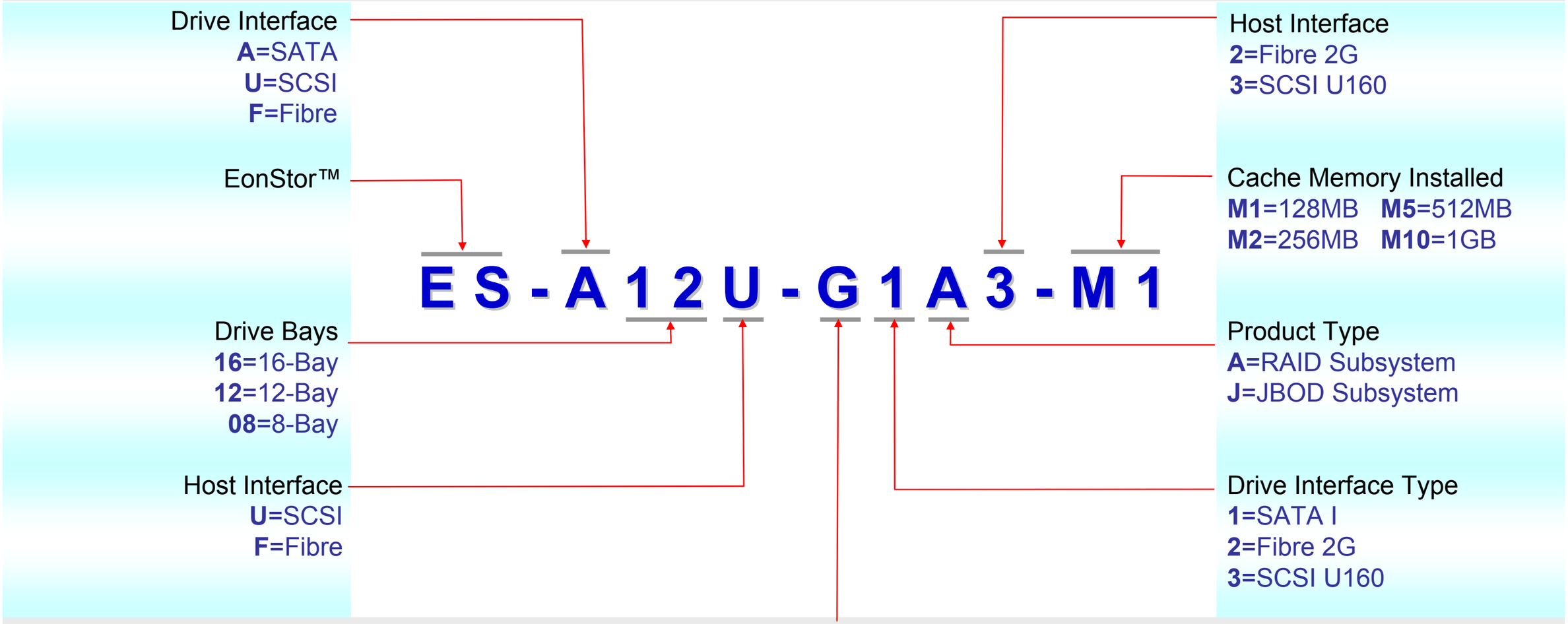
A08U-C2410
(Desktop Mode)



A08U-C2410
(Tower Mode)

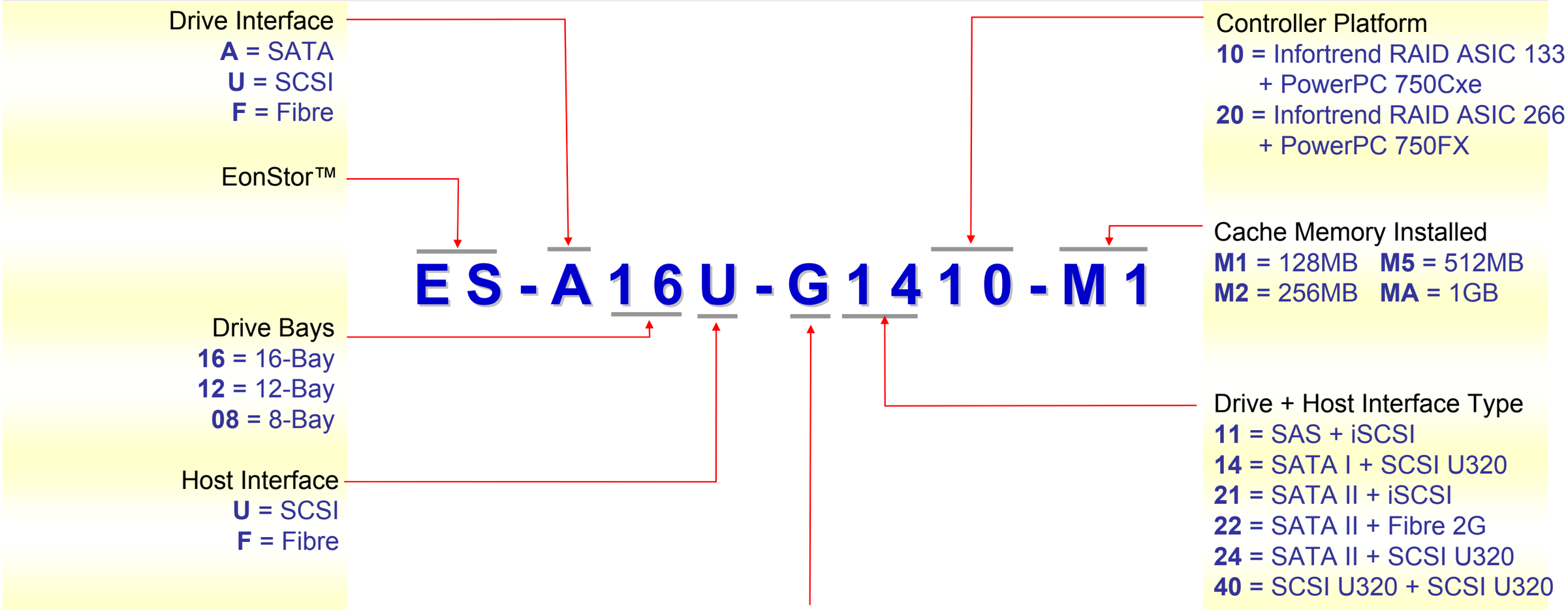
Subsystem Model Names

Existing Models



Subsystem Model Names

New Models Announced from March 2004



Controller Type

J=JBOD **S**=Single Upgradeable to Redundant

G=Single Controller **R**=Dual Redundant Controllers

Note: Existing models remain intact, only new models announced after March 2004 use new model naming.

Infortrend

EonStor Infortrend Tech, Inc.

High Capacity Guide - SATA

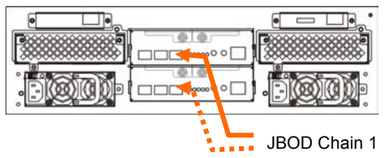
SATA Disk Based

Combination 1: A16F-R1A2 + A16F-J1210-G				
A16F-R1A2 *(3U, 16 Disks)*	+	**A16F-J1210-G** (Up to **7** units) *(3U, 16 Disks each)*	= Up to **128** Disks	Up to 24U Height
A16F-S1A2 *(3U, 16 Disks)*	+	**A16F-J1210-G** (Up to **7** units) *(3U, 16 Disks each)*	= Up to **128** Disks	Up to 24U Height
Combination 2: A16F-R1211 + A16F-J1210-G				
A16F-R1211 *(3U, 16 Disks)*	+	**A16F-J1210-G** (Up to **7** units) *(3U, 16 Disks each)*	= Up to **128** Disks	Up to 24U Height
A16F-S1211 *(3U, 16 Disks)*	+	**A16F-J1210-G** (Up to **7** units) *(3U, 16 Disks each)*	= Up to **128** Disks	Up to 24U Height
Combination 3: ER2510FS + A16F-J1210-G				
ER2510FS-4S *(1U, no disk)*	+	**A16F-J1210-G** (Up to **7** units) *(3U, 16 Disks each)*	= Up to **112** Disks	Up to 22U Height
ER2510FS-6S *(1U, no disk)*	+	**A16F-J1210-G** (Up to **14** units) *(3U, 16 Disks each)*	= Up to **224** Disks	Up to 43U Height
ER2510FS-4RH *(1U, no disk)*	+	**A16F-J1210-G** (Up to **7** units) *(3U, 16 Disks each)*	= Up to **112** Disks	Up to 22U Height
ER2510FS-6RH *(1U, no disk)*	+	**A16F-J1210-G** (Up to **14** units) *(3U, 16 Disks each)*	= Up to **224** Disks	Up to 43U Height
ER2510FS-4D *(1U, no disk)*	+	**A16F-J1210-G** (Up to **14** units) *(3U, 16 Disks each)*	= Up to **224** Disks	Up to 43U Height
ER2510FS-6D *(1U, no disk)*	+	**A16F-J1210-G** (Up to **28** units) *(3U, 16 Disks each)*	= Up to **448** Disks	Up to 85U Height

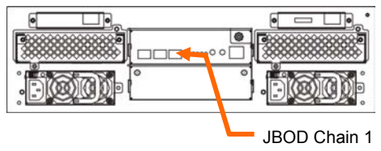
Cables and SFPs:

1. Fibre cables and SFPs are not included in the above models, should be purchased additionally.
2. At least 512MB cache memory is required in each RAID controller, when there are more than 96 disks in the configuration.
3. Host channels: Basically needs two LC-LC optical cables and four SFP modules. May vary depending on the connector type on the host computer or Fibre switch.
4. Drive channels: Each **A16F-J1210-G** unit requires two LC-LC optical cables and four SFP modules.
5. **ER2510FS-6RH**: It is recommended to use two of the drive channels as dedicated sync-cache channels, to gain an enhanced WRITE performance. When large capacity or more drives are required, user can configure and use four drive channels to connect drive JBODs.

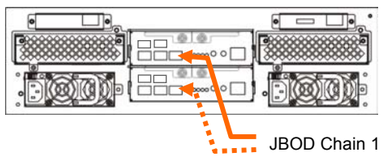
A16F-R1A2



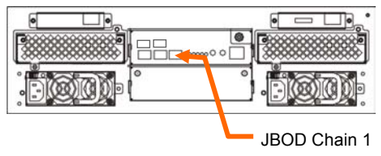
A16F-S1A2



A16F-R1211



A16F-S1211



RAID Controller Connections

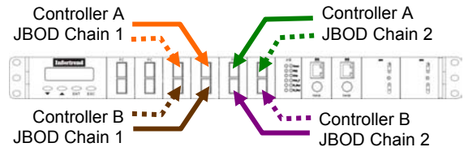
ER2510FS-6S

ER2510FS-4S

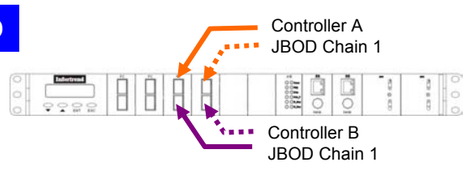
ER2510FS-6RH

ER2510FS-4RH

ER2510FS-6D



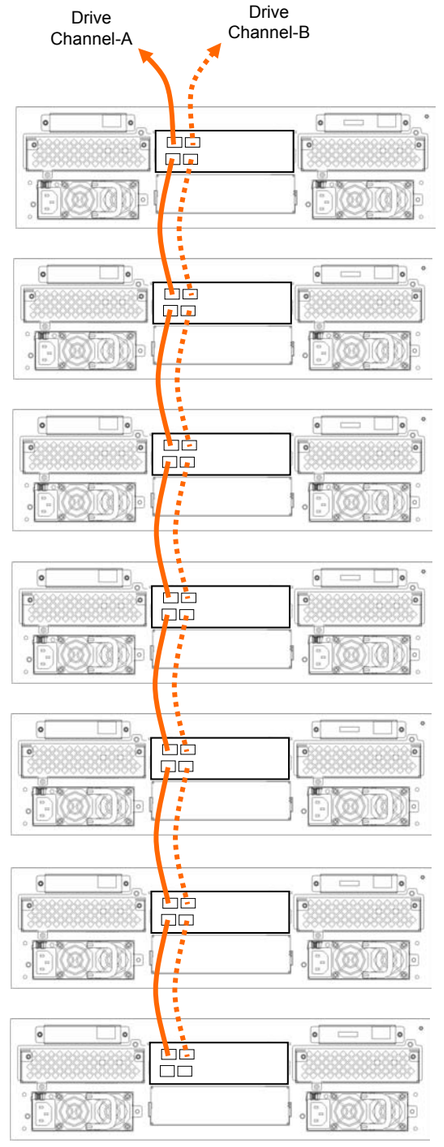
ER2510FS-4D



JBODs Connections

A16F-J1210-G

Connecting to the RAID Controller's Drive Channels



Up to 7 JBOD Subsystems can be chained in one pair of drive channels.
(Diagram shown above as one JBOD chain)

 27/08/2004

Infortrend®

EonStor Infortrend Tech, Inc.

High Capacity Guide - Fibre

Fibre Disk Based

Combination 1: F12F-G2A2 + F16F-R2J2 (or F16F-S2J2)				
F12F-G2A2 *(2U, 12 Disks)*	+	**F16F-R2J2** (or F16F-S2J2) (Up to **6** units) *(3U, 16 Disks each)*	=	Up to **108** Disks / Up to 20U Height
Combination 2: F16F-R2A2 + F16F-R2J2 (or F16F-S2J2)				
F16F-R2A2-A *(3U, 16 Disks)*	+	**F16F-R2J2** (or F16F-S2J2) (Up to **6** units) *(3U, 16 Disks each)*	=	Up to **112** Disks / Up to 21U Height
F16F-R2A2 *(3U, 16 Disks)*	+	**F16F-R2J2** (or F16F-S2J2) (Up to **6** units) *(3U, 16 Disks each)*	=	Up to **112** Disks / Up to 21U Height
F16F-S2A2 *(3U, 16 Disks)*	+	**F16F-S2J2** (or F16F-S2J2) (Up to **6** units) *(3U, 16 Disks each)*	=	Up to **112** Disks / Up to 21U Height
Combination 3: ER2510FS + F16F-R2J2 (or F16F-S2J2)				
ER2510FS-4S *(1U, no disk)*	+	**F16F-R2J2** (or F16F-S2J2) (Up to **7** units) *(3U, 16 Disks each)*	=	Up to **112** Disks / Up to 22U Height
ER2510FS-6S *(1U, no disk)*	+	**F16F-R2J2** (or F16F-S2J2) (Up to **14** units) *(3U, 16 Disks each)*	=	Up to **224** Disks / Up to 43U Height
ER2510FS-4RH *(1U, no disk)*	+	**F16F-R2J2** (or F16F-S2J2) (Up to **7** units) *(3U, 16 Disks each)*	=	Up to **112** Disks / Up to 22U Height
ER2510FS-6RH *(1U, no disk)*	+	**F16F-R2J2** (or F16F-S2J2) (Up to **14** units) *(3U, 16 Disks each)*	=	Up to **224** Disks / Up to 43U Height
ER2510FS-4D *(1U, no disk)*	+	**F16F-R2J2** (or F16F-S2J2) (Up to **14** units) *(3U, 16 Disks each)*	=	Up to **224** Disks / Up to 43U Height
ER2510FS-6D *(1U, no disk)*	+	**F16F-R2J2** (or F16F-S2J2) (Up to **28** units) *(3U, 16 Disks each)*	=	Up to **448** Disks / Up to 85U Height

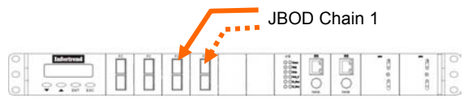
Cables and SFPs:

1. Fibre cables and SFPs are not included in the above models, should be purchased additionally.
2. At least 512MB cache memory is required in each RAID controller, when there are more than 96 disks in the configuration.
3. Host channels: Basically needs two LC-LC optical cables and four SFP modules. May vary depending on the connector type on the host computer or Fibre switch.
4. Drive channels: Each **F16F-R2J2** (or **F16F-S2J2**) unit requires two LC-LC optical cables and four SFP modules.
5. **ER2510FS-6RH**: It is recommended to use two of the drive channels as dedicated sync-cache channels, to gain an enhanced WRITE performance. When large capacity or more drives are required, user can configure and use four drive channels to connect drive JBODs.

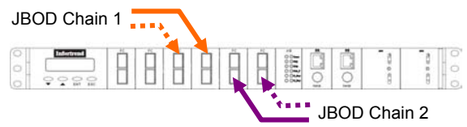
RAID Controller Connections

ER2510FS-6S

ER2510FS-4S

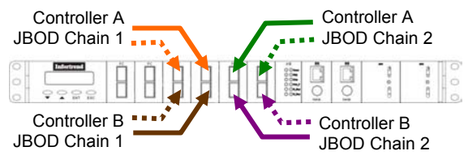


ER2510FS-6RH

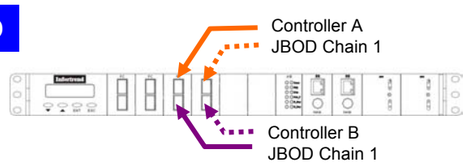


ER2510FS-4RH

ER2510FS-6D



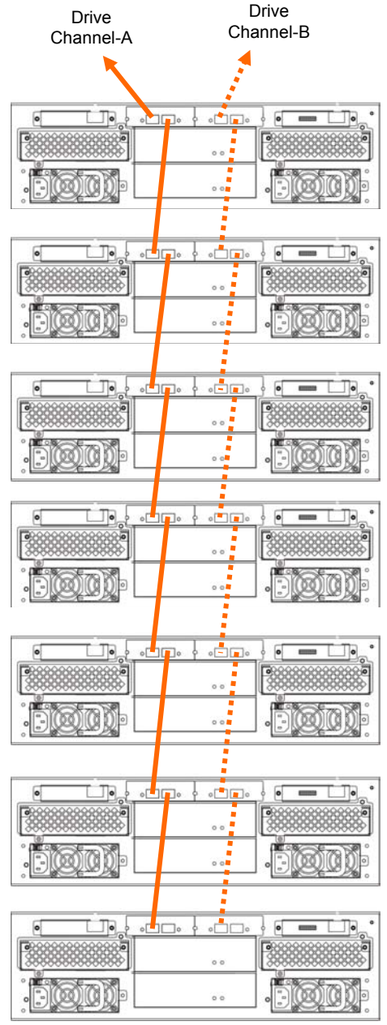
ER2510FS-4D



JBODs Connections

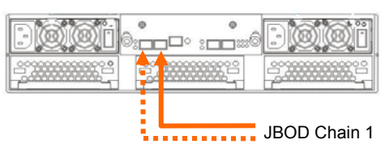
F16F-R2J2 / F16F-S2J2

Connecting to the RAID Controller's Drive Channels

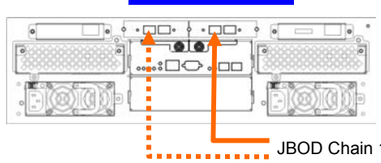


Up to **7** JBOD Subsystems (**ER2510FS**) or up to **6** JBOD Subsystems (**F12F, F16F**) can be chained in one pair of drive channels.
(Diagram shown above as one JBOD chain)

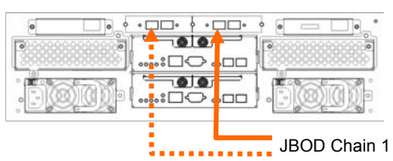
F12F-G2A2



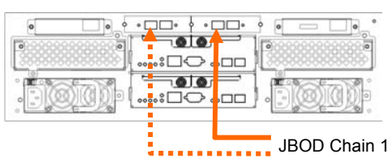
F16F-S2A2



F16F-R2A2



F16F-R2A2-A



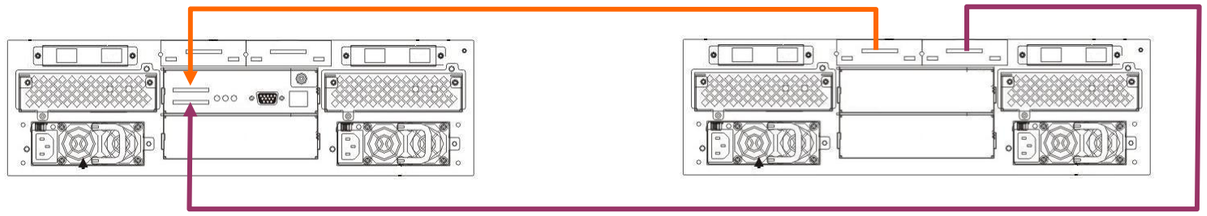
 27/08/2004

SCSI Disk Based

Combination 1: U16U-G4010-62 (or U16U-G3A3-6M2) + U16U-G3J3

U16U-G3A3-6M2 *(3U, 16 Disks)*	+	**U16U-G3J3** (Up to **1** unit) *(3U, 16 Disks)*	=	Up to **32** Disks	Up to 6U Height
U16U-G4010-62 *(3U, 16 Disks)*	+	**U16U-G3J3** (Up to **1** unit) *(3U, 16 Disks)*	=	Up to **32** Disks	Up to 6U Height

U16U-G3A3-6 **U16U-G4010-6** **U16U-G3J3**



SCSI Cables:

1. Two types of SCSI cables are available:

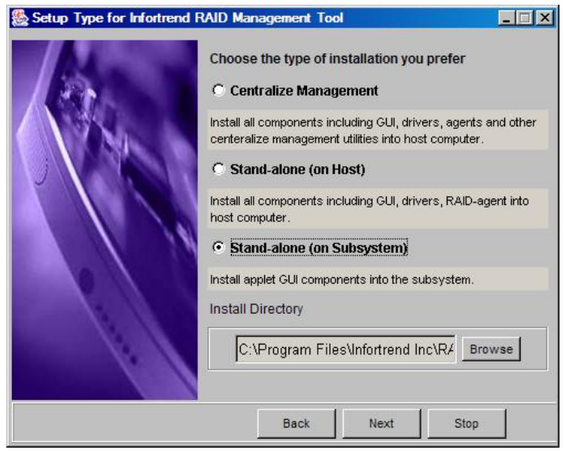
   9270UHstCab VHDCI – HD68, 1 meter

   9270UJBODCab VHDCI – VHDCI, 1 meter

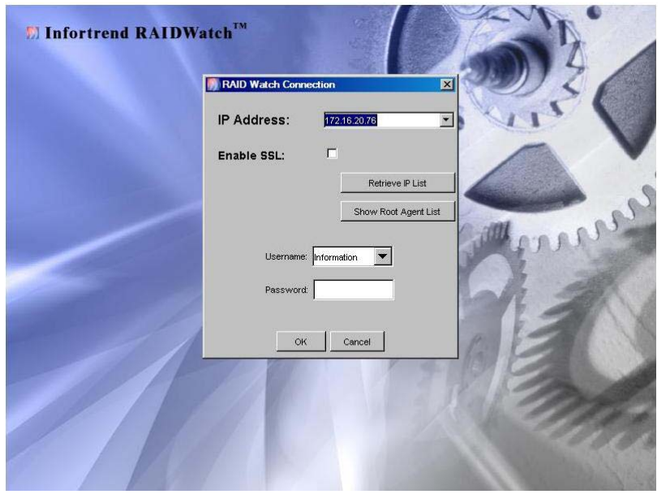
2. Host-side: Depending on the SCSI connector on the SCSI HBA in the host computer. Up to two SCSI cables can be connected. The **U16U-G3A3-6M2** includes one **9270UHstCab** (VHDCI - HD68) cable.

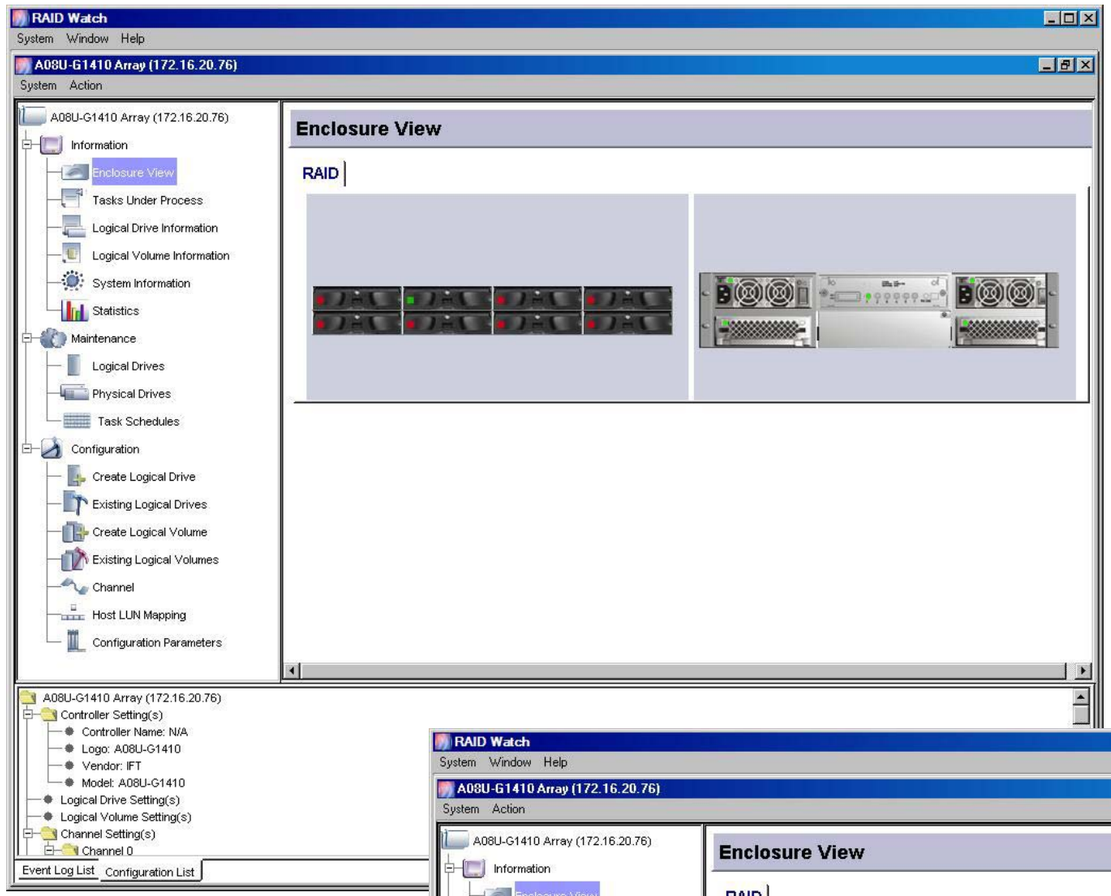
2. Drive-side: Two SCSI cables are required. (VHDCI-VHDCI cable) The **U16U-G3J3** includes one **9270UJBODCab** (VHDCI-VHDCI) cable, the other one should be purchased additionally.

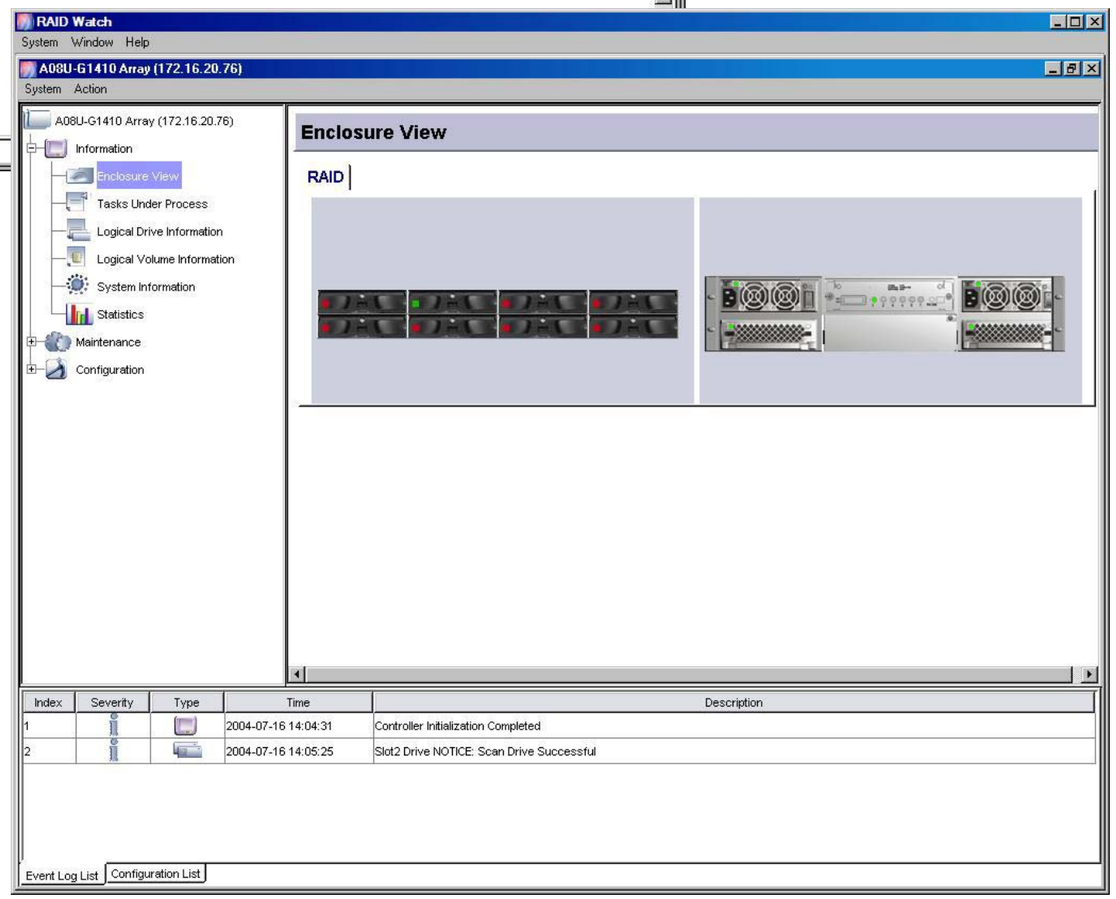
Install as “Central Management” or “Stand-alone (on Subsystem) Model:



Log on as “Configuration” (full access), “Maintenance” or “Monitoring”:







Established in 1992, Infortrend designs and manufactures the RAID ASIC, RAID controller, RAID firmware, RAID management software and RAID subsystems. Infortrend is ISO 9001 certified.

EonStor™ are RAID subsystems manufactured by Infortrend, EonRAID and SentinelRAID are RAID controllers manufactured by Infortrend.

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