SONNET
SIMPLY FAST

Basic RAID 5
Storage Solutions

FUSION D400QR5
Desktop Storage System

FUSION R400QR5
Rackmount Storage System

4-DRIVE HARDWARE
RAID 5 SATA
STORAGE SYSTEMS
WITH QUAD INTERFACE

Fusion R400QR5 Display

Fusion QR5 v1.0
-Menu

Fusion D400QR5 Quad Interface

eSATA   FIREWIRE 800   FIREWIRE 400   USB 2.0

Performance and Data Security

Considering a multi–drive storage system? If so, you already know about the benefits of striping data across multiple drives—you'll gain the faster performance necessary for working with HD video formats when you connect the system to an eSATA host controller. Sonnet's Fusion™ D400QR5 desktop and Fusion R400QR5 rackmount SATA storage systems deliver speed, reliability, and versatility in easy to deploy packages. Fusion D400QR5 and R400QR5 systems offer security, too—each one features a high performance internal RAID controller that manages the enclosed drives and supports RAID 5 drive formatting, which provides data protection in case one of the drives fails. Available in configurations from 2 to 6TB[1], these Sonnet storage systems incorporate an informative display and status LEDs, and simple to use controls that enable you to easily configure the drives or select information to be displayed.

High Performance with Data Protection

Connected to a Sonnet Tempo™ SATA E4P PCIe or X4P PCI-X host controller installed in a Mac® or Windows® computer, a Fusion D400QR5 or R400QR5 system's drives can be accessed at maximum speed[2], whether configured as a RAID 0 or RAID 5 set. With its drives configured as a RAID 5 group (four 1TB drives striped with parity across all group members), a single Fusion D400QR5 or R400QR5 system achieves data throughput of 225 MB/sec read and 177 MB/sec write, fast enough to support multiple streams of DV, HDV, DVCPRO, ProRes 422, or a single stream of

Key Features

▸ **High Performance, Protected Data**— When connected via eSATA and with four 1TB drives configured as a RAID 5 set, data transfers up to 225 MB/sec read, 177 MB/sec write while protecting the data

▸ **RAID 5 Onboard**—Integrated hardware RAID controller supports RAID 5 drive configuration on its own; no need for a specialized RAID controller card

▸ **Four Interfaces, Single Cable Connection**—Choose from eSATA, FireWire 800, FireWire 400, and USB 2.0 interfaces, and connect to your computer with a single cable

▸ **Informative Display and LED Indicators**—Provide operating status at a glance

▸ **Simple Configuration**—Integrated controls enable you to select RAID modes and configure the drives to meet your performance and data security needs, no matter which interface you choose

▸ **Quiet Fans**—Low fan noise levels make these Fusion storage systems suitable for use in noise–sensitive environments

▸ 2TB, 3TB, 4TB, and 6TB configurations [1]

▸ eSATA, FireWire 800, FireWire 400 and USB cables included

▸ Compatible with Sonnet Tempo™ SATA II PCI–X, PCIe, and ExpressCard/34 host controllers

▸ RoHS compliant

OS Compatibility

▸ Platform independent—Mac, Windows [4], and Linux

Quiet

Fusion D400QR5 storage systems integrate an ultra-quiet, user-swappable fan module using the Vantec Stealth™ fan. This fan is 80% quieter than a standard case fan, making these desktop system well suited for use in noise-sensitive environments. Fusion R400QR5 storage systems employ four low-noise fans, making these rackmount systems suitable for desktop use, too.

Secure Connection

Fusion D400QR5 and R400QR5 enclosures link to Sonnet Tempo SATA E4P and X4P SATA host controller cards with Sonnet's exclusive locking eSATA data cables with connectors that lock securely at both ends.

Technical Notes:

(1) Although most hard drive manufacturers define 1 gigabyte as 1,000,000,000 byte, the computer operating systems usually calculate a gigabyte by dividing the bytes (whether it is disk capacity, file size, or system RAM) by 1,073,741,824 (2^{30}). This distinction may be a cause of confusion, as a hard disk with a manufacturer rating of 500GB may have its capacity reported by the operating system as 454.7GB.

(2) When connected to a computer via its eSATA interface, Fusion D400QR5 and R400QR5 storage systems perform their best when used with a high performance SATA host controller such as Sonnet's Tempo SATA E4P for computers with PCI Express slots, Tempo SATA X4P for computers with PCI-X slots, or Tempo SATA Pro ExpressCard/34 for portable computers with an ExpressCard slot.

(3) Sonnet Technologies has qualified and specifies the hard drives listed here for use in Fusion D400QR5 and R400QR5 storage systems. These drives were chosen for their superior performance, error handling, and reliability characteristics, especially when used in RAID groups. Sonnet recommends the use of these Enterprise/RAID edition hard drives and select, Sonnet certified desktop hard drives in your Fusion storage system to ensure system reliability and performance. **STANDARD DRIVES MAY NOT BE SUPPORTED AND MAY DEGRADE SYSTEM RELIABILITY AND PERFORMANCE.**

uncompressed 10-bit NTSC video. Do you want even more performance? Up to four Fusion D400QR5 or R400QR5 systems can be ganged on a single Tempo SATA E4P or X4P controller for enhanced data throughput and double, triple, or even quadruple the available streams (as well as increasing the number of supported video formats).

One Cable, All the Data

Fusion D400QR5 and R400QR5 storage systems feature a quad interface that requires just a single locking data cable to connect the enclosure to a SATA host controller card. This efficient interface simplifies setup and cuts cable clutter without compromising performance. No SATA? No problem—connected via a single FireWire® 800, FireWire 400, or USB cable, all four drives can be accessed at the full speed of the respective interface. Sonnet even includes all the cables so you can connect your Fusion storage system right out of the box.

Information on Display

Fusion 400QR5 storage systems feature integrated controls and an informative display (rear-mounted on the R400QR5), making setup and monitoring simple. RAID mode, drive health (S.M.A.R.T., or Self Monitoring, Analysis, and Reporting Technology), drive temperature, and operating status can be displayed with a couple of button presses. Status LED indicators enable you to determine drive presence, activity, and fault status at a glance.

Quiet Either Way

To keep things cool, the Fusion D400QR5 uses a swappable fan module. The fan is 80% quieter than a standard case fan, making this system perfectly suited for use in noise-sensitive environments. The 1U rackmount Fusion R400QR5 system enclosure, at just 1.75" tall, is simple to deploy in most server racks, but can also be used on a desktop—use of four low noise fans make it suitable for use in noise-sensitive environments, too.

Driving Force

Fusion D400QR5 and R400QR5 storage systems employ Enterprise/RAID Edition hard drives or select, Sonnet certified desktop drives[3] that have been selected for their superior performance, error handling, and reliability characteristics, especially when used in RAID groups. These drives are subjected to hours of additional, stringent testing to check for soft errors, vibration, and other reliability predictors. Just the sturdiest drives pass these tests and are prepared with special RAID-optimized firmware to become the building blocks of a super-reliable Fusion storage system.

Versatile Performance

These systems are ideal for use in mixed

Capture Card Compatibility

▸ Apple Final Cut Pro, Adobe Premiere Pro

Video Editing Application Compatibility

▸ Apple Final Cut Pro, Adobe Premiere Pro

Technical Specifications

Part No.	
FUS-D4QR5-2TB (Fusion D400QR5-2TB)	
FUS-D4QR5-3TB (Fusion D400QR5-3TB)	
FUS-D4QR5-4TB (Fusion D400QR5-4TB)	
FUS-D4QR5-6TB (Fusion D400QR5-6TB)	
FUS-R4QR5-2TB (Fusion R400QR5-2TB)	
FUS-R4QR5-3TB (Fusion R400QR5-3TB)	
FUS-R4QR5-4TB (Fusion R400QR5-4TB)	
FUS-R4QR5-6TB (Fusion R400QR5-6TB)	
Hardware	
Warranty	2-year
HDD Warranty	Additional 1-year or 3-year, administered by drive manufacturer
External Connectors	eSATA, 2 x FireWire 800, FireWire 400, Mini-USB
Drives Supported	1.5 & 3 Gb per second Serial ATA; up to 7,200 RPM
Data Transfer Speed	Up to 225 MB/s, depending on drives, interface, and configuration
Supported Video Formats	Uncompressed 10-bit NTSC HD, DV, HDV, DVCPRO, and uncompressed SD
Power Supply	Universal 180W, 100-240V AC, 50-60Hz
Operating Temperature (D400QR5)	+32° F to +95° F (0° C to +35° C)
Operating Temperature (R400QR5)	+32° F to +95° F (0° C to +35° C)
Dimensions (D400QR5)	5.9 x 11.2 x 7.5 in (14.9 x 28.5 x 19.0 cm)
Dimensions (R400QR5)	17.0 x 16.5 x 1.75 in (43.8 x 41.9 x 4.4 cm)
Weight (D400QR5)	14.7 lbs (6.7 kg) with drives, 9.1 lbs (4.1 kg) without
Weight (R400QR5)	18.4 lbs (8.3 kg) with drives, 12.8 lbs (5.8 kg) without
Package Contents (D400QR5)	Desktop disk enclosure, four 3.5" drive modules, one locking eSATA cable, one FireWire 800 cable, one FireWire 400 cable, one USB cable, power cord, drive module keys, User's Guide
Package Contents (R400QR5)	Rackmount disk enclosure, four 3.5" drive modules, one locking eSATA cable, one FireWire 800 cable, one FireWire 400 cable, one USB cable, power cord, User's Guide
Accessories	
Fusion 500GB RAID Drive Module – Spare drive tray for Fusion D400QR5/R400QR5	
Part No.	**FUS-RM-0500GB**
Fusion 750GB RAID Drive Module – Spare drive tray for Fusion D400QR5/R400QR5	
Part No.	**FUS-RM-0750GB**
Fusion 1TB RAID Drive Module – Spare drive module for Fusion D400QR5/R400QR5	
Part No.	**FUS-RM-1000GB**
Fusion 1.5TB RAID Drive Module – Spare drive module for Fusion D400QR5/R400QR5	
Part No.	**FUS-RM-1500GB**

(4) Windows XP 32-bit (most versions of Windows XP are 32-bit) does not support volumes greater than 2TB. Windows XP x64, Windows Vista Ultimate/Enterprise (32-bit and 64-bit editions), Windows Server 2003 and Server 2008 support volumes greater than 2TB, but must be formatted using the GPT file system, which is not accessible by Windows XP 32-bit.

(5) Barracuda ES.2 drives may be used with revision J (April 9, 2008) and later versions of Fusion D400QR5 and all versions of Fusion R400Q, but only Seagate ES.2 drives with firmware versions SN06 and newer compatible. Seagate ES.2 drives with firmware versions SN03, SN04, or SN05 are NOT compatible. Click here to view location of firmware number on hard drive. (6) Only Seagate Barracuda 7200.11 1.5TB drives with firmware versions SD1B and CC1H are compatible.

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environments—various operating systems, editing applications and output demands requiring the flexibility and interoperability that Fusion D400QR5 and R400QR5 storage systems provide. These Fusion storage systems support Mac OS® X, Windows Vista, Windows XP(4) Windows Server 2008 and 2003, and Linux. They are compatible with capture cards from AJA, Blackmagic Design, Matrox, and Bluefish444, and work with all mainstream video editing applications including Apple® Final Cut Pro®, and Adobe® Premiere® Pro CS4.

Fusion Quiet Fan Module – Spare fan module for Fusion D400QR5	
Part No.	FUS-XFAN
Rack Mount Sliding Rail Kit for Fusion R400QR5 (23-26.5" Chassis)	
Part No.	FUS-RSS-S
Rack Mount Sliding Rail Kit for Fusion R400QR5 (27-30.5" Chassis)	
Part No.	FUS-RSS
Rack Mount Sliding Rail Kit for Fusion R400QR5 (29-32.5" Chassis)	
Part No.	FUS-RSS-L

Specifications subject to change without notice.

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