

**SS&W™ MC1600 and MC1601  
Network Video Servers**

## SS&W™ MC1600 Series NVS

### High Performance Video Recording and Storage in one Box

The SS&W MC1600 Series is a flexible hardware platform that can be loaded with one of a number of different network video software solutions to create a video application server with internal storage (DAS) or used as a dedicated network storage appliance (NAS or SAN). Designed to support Intel® dual-core and quad-core CPU technologies, the MC1600 and MC1601 offer both exceptional performance and true flexibility. The MC1600 Series are rack mount application and storage server that support 16 enterprise-class Serial Attached SCSI (SAS) or high-capacity Serial ATA (SATA) Hard Drives. A PCI Express\*-based platform that supports up to 32 GB of fully buffered registered ECC DIMMs and up to two high-performance dual-core or quad-core Intel® Xeon® processors, SS&W NVS systems can accommodate both high camera/frame rate and high capacity storage needs in one box. Flexible network connectivity including dual or quad port GB Ethernet, 10 GB, Fiber Channel, Infiniband or iSCSI insures low latency, high quality video recording and playback.

#### Increasing Need for Processing Power

Today's video surveillance networks are being pushed to the limit. Video applications have evolved to incorporating video analytics, motion detection, and long term archiving and high sustained frame recording rates, which require high levels performance power. In addition, software driven solutions are often replacing dedicated video monitoring equipment such as video walls and matrix switchers, which require specialized PC equipment as well.

To respond to these challenges, SS&W designs Intel® based multi-core server systems with incredible processing power, fast SAS controller based hard drive arrays, and hardware TCP offload engines to speed video processing on high density IP camera systems. Properly designed systems are essential for customer satisfaction.



**SS&W MC1600 3U Rack Mount NVR**



#### Addressing Storage Needs

The SS&W MC1600 Series addresses growing storage demands by supporting up to 16 enterprise-class SAS or high-capacity SATA hard drives for data storage and up to two additional drives for the operating system and video software applications. Data array drives feature true hardware RAID levels 0, 1, 5,6, 10, 50 and 60, making data more reliable and with faster access times. Support for high-capacity, 7,200-RPM SATA hard disk drives (HDD), which are less expensive than Fiber Channel or SCSI drives make SS&W servers an exception value. With a built in Serial Attached SCSI connector, adding additional storage is easy and more affordable than ever. The MC1600 Series also supports SAS HDDs, which offer enterprise-class reliability, with spindle speeds of 10,000 RPM and 15,000 RPM.

#### Powerful Software – Added Value

Through partnerships with leading edge software manufacturers, SS&W strives to provide security integrators and IT departments with the very best servers available today. Syam Software provides Remote Management products, which greatly reduce the need for onsite visits when coupled with SS&W's Intel vPro workstations and IPMI and AMT enabled servers. Other powerful features such as power and asset management, a proactive alert management system and third-party software update and deployment tools make SS&W true Value Added Systems.

Paragon Software's Drive Backup software provides disk-to-disk backup and drive imaging capabilities locally, to network storage device or offsite through secure FTP. Disk imaging can save thousands of dollars and precious time in the event of system failures. By getting security systems back online fast, SS&W helps you show customers their security concerns are truly in the best hands.

	<b>Security Servers and Workstations</b>	
	Equinunk, PA	
	1-862-209-0310	
	<a href="http://www.securityserversandworkstations.com">www.securityserversandworkstations.com</a>	

## Storage Options

The MC1600 Network Video Server incorporates up to 2 internal RAID 1 SAS drives for the operating system and NVR software. This allows all 16 hot swap, front accessible bays to be used for video storage. Utilizing Raid Enabled SAS or SATA hard disk drives, the MC1200 Series Servers have capacity for up to 16 TB of Raw storage, or various RAID configurations including RAID 0, 1, 5, 5 + 1, 10, 50 and JBOD.

## Operating Systems

Red Hat Enterprise Linux 4.0\*  
 Microsoft Windows Storage Server 2003\*  
 Microsoft Windows Server 2003 Enterprise\*  
 Microsoft Windows Server 2003 Standard\*  
 Microsoft Windows Unified Data Storage Server 2003\*

## Syam Software™

Provides remote management, proactive alert management, asset and power management, and software update and deployment tools.



## Paragon Drive Backup™

Provides disk imaging, network and offsite backup, rapid recovery, disk cloning and Universal Restore (Restore to any compatible hardware).

## StoreView™

Provides chassis and server management, monitor temperatures, voltages, fan speeds, intrusion, CPU utilization and much more. Also provides Windows based RAID management and configuration capabilities.

Features	Benefits
Support for up to 16 hot-swappable SAS or SATA drives in a 2U form factor	Add up to 16 TB of raw storage (with 1 TB SATA HDDs) Add up to 128 TB of external storage per server
Intel® Xeon® processors Support for one or two 5100 series or 5300 series dual-core or quad-core	Extreme power for the most demanding video applications. Virtualization Ready.
Dual 1 Gb Ethernet Network Interface Connections	Provide smooth live video and playback to workstations
Intel® RAID Controller	Hardware support for RAID 0, 1, 5, 6, 10, 50, 60
Built in KVM	Control system from any web browser
<b>Product Specifications</b>	
Raw storage	Expandable to 16.0 TB– using twelve 1 TB SATA drives
Hard disk drive supported	3.5" SAS or SATA for the 16 data drives, or up to two optional 2.5" SAS or SATA boot drives (internally mounted)
Processor	Dual-Core Intel® Xeon® processor 5100 series, 1066 MHz FSB with 4 MB of L2 cache Quad-Core Intel® Xeon® processor 5400 series, up to 1333 MHz FSB with 8 MB of L2 cache
Memory capacity 8 slots, expandable to 32 GB maximum	Memory type Fully buffered DIMM technology (FBDIMM) memory. DDR2-533 and DDR2-677 FBDIMMs – Available as hot failover RAM
Temperature sensor	Two temperature sensors are located on the backplane and baseboard that allows drive cage temperature monitoring by enclosure management
Client connectivity	Client connectivity via Internet Protocol Small Computer System Interface (iSCSI) Dual GB/s Ethernet
DVD ROM & Floppy	
MC1600 Basic Configuration	Single Intel Quad Core Xeon Processor, Intel 5000 Series Motherboard, 2 GB ECC FBDIMM Memory (Redundant or hot spare memory optional), 73 GB 10K SAS OS Drive, Intel Storage Server with 16 Hot Swap Bays, Intel 16 Port SAS Raid Controller, 800 W Power Supply, and Windows 2003 Server pre-installed. Include Paragon Server Edition and SyAM Server License.
MC1601 Basic Configuration	Dual Intel Quad Core Xeon Processor, Intel 5000 Series Motherboard, 4 GB ECC FBDIMM Memory (Redundant or hot spare memory optional), Dual RAID 1 73 GB 10K SAS OS Drive, Intel Storage Server with 16 Hot Swap Bays, Intel 16 Port SAS Raid Controller, Redundant 800 W Power Supply, and Windows 2003 Server pre-installed. Include Paragon Server Edition and SyAM Server License.

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