VM500 Series Media Servers

Video Media Server for Body Worn Camera Solution

The VM500 Series Media Servers are part of a video management solution for body worn cameras which use the SoleraTec[™] Phoenix Digital Evidence Management (DEM) software. These servers interface with the video intake stations and the long term archive system comprised of either traditional hard drives or a tape library. The transcoded low resolution video files processed on the VT500 video intake systems is stored on the VM500 series media server for easy search and review. The media server has network interfaces to connect to the departments LAN so client systems can access video and arrange case files. In addition, a dedicated SAS/Fibre Channel interface is used to connect with the high resolution video stored on the tape library. The VM500 series media are architected for maximum video access performance and data protection. Each system has separate hard drives for the Operating System, DEM database and video storage while including redundant power supplies, RAID 1 data mirroring for the OS and database drives and either RAID 5 or RAID 6 for the low resolution video files with the option for hot spares. The CPU, system memory and storage are all scalable to meet any solution configuration requirements. These rack mount media servers include a Windows Operating System, offer hot swappable drive bays to facilitate ease of service and are available with an on-site service contract

The VM500 are designed to be the DEM focal point as they manage the location of all video and interface to clients. Storage is scalable from a few Terabytes to over 140 TB in a single chassis – supporting over a Petabyte of storage in an external tape library.

Applications and Features

Applications:

Body Worn Camera Video Media Server

Features:

- o Rack Mount 2U, 3U or 4U form factor
- Intel[®] Xeon technology
- Expandable system memory
- Microsoft Windows® Operating System
- Various user defined hard drive densities and configuration
- LAN and SAS interfaces
- Separate OS, database and storage drives in hot swap drive bays



Common Configuration:

- VM500: 3.5 GHz HEX Core processor, 32 GB RAM, 2 LAN Ports, 8 SAS Ports, Windows 2012 Server
- VM505: Two 3.4 GHz Hex Core processors, 64 GB RAM, 2 LAN Ports, 8 SAS Ports, Windows 2012 Server

Specifications:

SUPPLIED ACCESSORIES

Power Cable	1-3 USA Standard 117VAC, 3 prongs, 6ft
Keyboard	1 Basic Keyboard
Mouse	1 USB, Scroll Wheel, 3 Button
Restore	All original installation discs
Rail Kit	Rack mount systems only

SYSTEM

Processors	Intel ® Xeon® Processor(s)
Internal Memory	32 to 64 GB DDR4 RAM 2400 MHz
Operating System	Windows 2012 Server
Operating System Storage	250 GB SATA with RAID 1 Option
Video Archive Capacity	Up to 160 TB SATA III
RAID Level	None, 0, 1, 5 or 6 with Optional Hot Spares
Network Interface	2 Gigabit Ethernet RJ-45 (1000BaseT)
Auxiliary Interfaces	USB 2.0 Ports
Maintenance	On-site Next Business Day Available
Maintenance Upgrade	4 Hour response 24x7 years (Option)

VIDEO

VGA Processing Equivalent	Up to 2000 VGA/sec* or 250 Mbps
Resolution	QCIF to mega-pixel based camera spec
Display	1, 2 or 4 monitor outputs available (must be specified at time of
	order)

ENVIRONMENTAL

Operating	10° to 35° C (50° to 95° F), 8% to 90% (non-condensing)
Storage	-40° to 70° C (-40° to 158° F), 5 to 95% (non-condensing)

PHYSICAL

CASE C

Form Factor	Mid-Tower Desk Top with 4 Hot Swappable Storage Bays
Power Supply	650 watt 1+1 Redundant
Cooling	1 x 120 mm (Rear) & 2 x 120 mm (Middle) Fans
Dimensions	(HxWxD) 16.7 x 8.7 x 24.4 in. (425 x 220 x 620 mm)
Unit Weight (gross)	Approximately 50 lbs (22.7 kg.)

CASE D

Form Factor	Mid-Tower Desk Top with 8 Hot Swappable Storage Bays
Power Supply	600 watt
Cooling	1 x 120 mm (Rear) & 2 x 120 mm (Middle) Fans
Dimensions	(HxWxD) 16.7 x 8.7 x 24.4 in. (425 x 220 x 620 mm)
Unit Weight (gross)	Approximately 50 lbs (22.7 kg.)

CASE E

Form Factor	Mid-Tower Desk Top with 8 Hot Swappable Storage Bays
Power Supply	650 watt 1+1 Redundant
Cooling	1 x 120 mm (Rear) & 2 x 120 mm (Middle) Fans
Dimensions	(HxWxD) 16.7 x 8.7 x 24.4 in. (425 x 220 x 620 mm)
Unit Weight (gross)	Approximately 50 lbs (22.7 kg.)

Web site: <u>www.vnssystems.com</u> ES052B

CASE F

Form Factor	Desk Top Workstation with 13 Hot Swappable Storage Bays
Power Supply	650 watt 1+1 Redundant
Cooling	1 x 120 mm (Rear) & 4 x 120 mm (Middle) Fans
Dimensions	(HxWxD) 16.9 x 8.7 x 26 in. (432 x 220 x 660 mm)
Unit Weight (gross)	Approximately 50 lbs (22.7 kg.)

CASE L

Form Factor	2U Rack Mount with 4 Hot Swappable Storage Bays
Power Supply	650 watt
Cooling	4 x 80mm (front)
Dimensions	(HxWxD) 3.5 x 16.8 x 25.6 in. (89 x 426 x 650 mm)
Unit Weight (gross)	Approximately 60 lbs (27.3 kg.)

CASE M

Form Factor	2U Rack Mount with 4 Hot Swappable Storage Bays	
Power Supply	550 watt Redundant	
Cooling	4 x 80mm (front)	
Dimensions	(HxWxD) 3.5 x 16.8 x 25.6 in. (89 x 426 x 650 mm)	
Unit Weight (gross)	Approximately 60 lbs (27.3 kg.)	

CASE N

Form Factor	4U Rack Mount with 8 Hot Swappable Storage Bays
Power Supply	665 watt
Cooling	4x 5000 RPM Hot-Swappable Cooling Fans
	2x 5000 RPM Hot-Swappable Rear Exhaust Fan
Dimensions	(HxWxD) 7 x 17.2 x 25.5 in. (178 x 437 x 648 mm)
Unit Weight (gross)	Approximately 65 lbs (29.5 kg.)

CASE O

Form Factor	4U Rack Mount with 8 Hot Swappable Storage Bays
Power Supply	760 watt Redundant
Cooling	4x 5000 RPM Hot-Swappable Cooling Fans
	2x 5000 RPM Hot-Swappable Rear Exhaust Fan
Dimensions	(HxWxD) 7 x 17.2 x 25.5 in. (178 x 437 x 648 mm)
Unit Weight (gross)	Approximately 65 lbs (29.5 kg.)

CASE P

Form Factor	2U Rack Mount with 10 Hot Swappable Storage Bays
Power Supply	650 watt Redundant
Cooling	4 x 8032mm Fans & 2 x 8025mm Rear Fans
Dimensions	(HxWxD) 3.5 x 16.9 x 26 in. (132 x 430 x 660 mm)
Unit Weight (gross)	Approximately 65 lbs (29.5 kg.)

CASE Q

Form Factor	3U Rack Mount with 14 Hot Swappable Storage Bays
Power Supply	650 watt Redundant
Cooling	5 x 8032mm Fans & 2 x 8025mm Rear Fans
Dimensions	(HxWxD) 5.2
	x 16.9 x 26 in. (176 x 430 x 660 mm)
Unit Weight (gross)	Approximately 65 lbs (29.5 kg.)

CASE R

Form Factor	4U Rack Mount with 14 Hot Swappable Storage Bays
Power Supply	1280 watt Redundant
Cooling	5 x 8032mm Fans & 2 x 8025mm Rear Fans
Dimensions	(HxWxD) 5.2
	x 16.9 x 26 in. (176 x 430 x 660 mm)
Unit Weight (gross)	Approximately 115 lbs (52.25 kg.) depending on hard drive count

Web site: www.vnssystems.com

Part Numbering:

VNS Part numbers are 14 characters.

Platform:

VM500: Optimized for Phoenix DEM

0 1 2 R 5 0 6 0 VNS Platform Series Form Factor No. Monitors Storage **RAID Status** Operating System

Form Factor:

- A: Mid-Tower Desktop
- B: Pedestal Desktop
- C: Pedestal Desktop with Redundant Power Supply
- D: Workstation Desktop
- E: Workstation with Redundant PS
- F: High Density Workstation with Redundant PS
- K: 2U Rack Mount Chassis
- L: 2U Rack Mount with 6 Hot Swap Drive Bays
- M: 2U Rack Mount w/ 6Hot Swap Drives & Redundant PS
- N: 4U Rack Mount w/8 Hot Swap
- O: 4U Rack Mount w/8 Hot Swap Drive Bays & Redundant PS
- P: 2U Rack Mount w/12 Hot Swap Drive Bays & Redundant PS
- Q: 3U Rack Mount w/16 Hot Swap Drive Bays & Redundant PS
- R: 4U Rack Mount w/24 Hot Swap Drive Bays & Redundant PS

Number of Monitors: 1, 2, or 4

Number of Hard Drives: Quantity of Hard Drives used for Storage (01 = 1, 05 = 5, etc)

Drive Density: = 500 GB, 10 = 1000 GB, 20 = 2000 GB, 30 = 3000 GB, 40 = 4000 GB and 60 = 6000 GB

RAID Status:

- O: No RAID with RDX Drive
- P: RAID 0 with RDX Drive
- Q: RAID 5 with RDX Drive
- R: RAID 5
- S: No RAID
- T: RAID 0
- Y: RAID 6

Operating System:

- K: Windows 2012 Server
- L: Windows 2012 Server with a RAID 1 OS Drive
- X: Windows 10 Professional x64 Edition
- V: Windows 10 Professional x64 Edition with a RAID 1 OS Drive

Example:

VM500R-11960YL: Enterprise NVR in a rack mount case with redundant power supply, support for one monitor, 114TB of raw video storage (19 x 6000 GB hard drives) configured as RAID 6 Array with Windows 2012 Server OS on a RAID 1 Array.

*VGA VGA/sec processing dependent on video surveillance management software package Specifications subject to change without notice Intel and Pentium are registered trade marks of Intel Corporation Windows is a registered trade mark of Microsoft Corporation

Not all cases are supported on all platforms