VMS Series
Virtual Matrix

Aventura's Virtual Matrix is the security industry's first fully digital expandable Matrix solution on a PC-platform.

Cameras connected to the video inputs can be output to specified monitors using the systems graphical user interface. Cameras can be drag-and-dropped as individuals or groups to populate a monitor and then be viewed in a sequence.

The matrix function also supports alarm management and will pop up a camera or group of cameras to specified monitors on alarm. Pan-Tilt-Zoom cameras are not a problem as the system supports virtually all the most popular current and legacy protocol.

The Virtual Matrix can support 64 monitors on a single-chassis but can be daisy-chained for larger deployments on a virtual basis.

Physical description
- Max 64 video composite out (PAL, NTSC)
- Max 64 audio out (linear)
- 1 line in (for voice talk)
- 2 10/100/1000 Ethernet
- 1 RS-485 Port
- 1 RS-232Port
- 4 USB Ports
- 2 DVI
- Redundant power supply
- Small form factor version available

Compression Function:
- Support maximum 64 channels video out
- Support maximum 64 channels audio out
- The output video and audio streams are integrated to generate the synchronized H.264/SVC stream
- Supports following resolution: PAL:4CIF (704x576), DCIF (528x384), 2CIF(704x288),CIF(352x288), QCIF(176x144); NTSC: 4CIF (704x480), DCIF(528x320), 2CIF(704x240),CIF (352x240), QCIF(176x120)
- Supports multi-zone motion detection
- Supports position configurable OSD. Supports watermark

Network Functions:
- Supports TCP/IP (ARP, RARP, IP, ODP, TCP, PPP, PPPoE, DHCP, SNMP, etc)
- Supports broad-band transmission (ADSL, etc)
- Supports narrow-band transmission (PSTN, etc)
- Streams of one or more channels, Net DVR's running state and alarm state can be accessed through network
- Supports remote control of PTZ
- Streams can be recorded in a remote host PC
- Supports Net DVR remote upgrading
- PC hosts can gain direct control via RS-232 or RS-485 port
- Supports voice talk between host in surveillance center (back end) and Net DVR (front end)
- Supports embedded web server. Browser can be used to access Net DVR

PTZ control:
- Supports Pan-Tilt-Zoom control and Preset through front, keyboard and network
- Supports most popular PTZ protocol
- Ability to customize new PTZ protocol
- Support RS-485/RS-232/Ethernet interface keyboards

Alarm Functions:
- Supports Motion detection alarm, switch alarm, signal lost alarm, exception alarm, etc.
- Supports setup of alarm related with PTZ preset

Others:
- User-friendly menu interface
- Multi-level user priority

Image above represents Rack mount version, Small Form Factor version available

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AVAILABLE MODELS

Part number	Description
VMS-04	4 Monitors, 200 GB HD
VMS-08	8 Monitors, 200 GB HD
VMS-12	12 Monitors, 200 GB HD
VMS-16	16 Monitors, 200 GB HD
VMS-24	24 Monitors, 200 GB HD
VMS-32	32 Monitors, 200 GB HD
VMS-40	40 Monitors, 200 GB HD
VMS-48	48 Monitors, 200 GB HD
VMS-56	56 Monitors, 200 GB HD
VMS-64	64 Monitors, 200 GB HD

SPECIFICATIONS

SYSTEM	
Series	Professional
Motherboard & Chipset	Intel 915U
CPU	Pentium 4 3.2 MHz Prescott 640 LGA 775
RAM	1GB DDR2 PC2 4200

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Storage	Up to 4 TB SATA (expandable)
Video Display	GeForce 6600GT PCI Express (Dual VGA)
OS	Windows 2000, XP ,Linux
Video Compression	H.264 Advanced Video Compression (Multicast)
Audio Compression	OggVorbis 16Kbps
Chassis Type	4U Rackmount (Optional 6U)
Storage Media	DVD-RW
Mouse	Optical PS/2
Keyboard	106-Key
LAN	10/100/1000 Base T Ethernet
Modem	V.92 PCI 56k
Backup Storage	(Optional) DAT- Supports IDE, SCSI, NAS, DDS3/4, RAID
Decoder	PCI-X Hardware Decoder
Video Outputs	1~64 BNC (1.0Vp-p 75 O) Resistance 75Ω (NTSC/PAL)
Audio Outputs	1~64 BNC (1.0Vp-p 75 O) Linear Level 600Ω
HARDWARE	
Size	4U Chassis: 17" x 18" (20" w/ handle) x 7"
Weight	Up to 35 lb on Standard 4u Chassis
Power Supply	Max. 650W, 90~264V(47Hz~65Hz)
Power	110/220 VAC, 60/50 Hz (non condensing) at 40°C
Operating Temperature	25°F ~ 110°F
Power Management	Programmable auto-reboot in case of power loss
UPS	External UPS (Optional)
MONITORING	
Interface	Web Graphical User Interface
Display Rate	Real-Time All Channels Simultaneous (30FPS/NTSC 25FPS/PAL)
Display Resolution	QCIF, CIF, 2CIF, DCIF, 4CIF
PTZ Control	PTZ GUI Interface (RS-232/422 Interface)
ARLARM	
Alarm Input	Via Relay Sensor (16 I/O)
Alarm Output	Email, SMS, FTP Image Files (16 I/O)
AUTHENTICATION	
Encrypted Watermark	AES/MD5 (Court Admissible)
REMOTE	
Monitoring	Full Remote Control PSTN, ISDN, ADSL, LAN and TCP/IP
STANDARD	
Safety Standards	EN60950, UL1459
APPROVALS	
EMC Standards	EN55022 Class-B, EN50082-1
FCC	Part 15 Class-B, VCCI Class-2
Warranty (Effective Jan 1, 2009)	
1 Year	

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