



## DVSM DIGITAL VIDEO SURVEILLANCE MONITORING

MODEL **VANGUARD**

Smart Search functionality added

### CAPABILITIES & FEATURES

- REAL-TIME DISPLAY & REAL-TIME RECORDING
- HIGH IMAGE QUALITY & MULTI-SCREEN DIVISION (FULL, 4, 8, 16 SCREEN DIVISION)
- REAL-TIME MONITORING & MULTI-CHANNEL SEARCHING FROM ANYWHERE IN THE WORLD VIA NETWORK
- RECORDING & PAN/TILT CONTROL REMOTELY
- EVENT RECORDING PROGRAMMABLE
- PRESET POSITIONING BY TRIGGER
- AUTHENTICATION WATERMARKING
- MOTION DETECTION FUNCTION
- DISPLAY MASKING BY VIDEO CHANNEL
- MAXIMUM OF 16 SENSORS & ALARM OUTPUT CONTROLS
- PRE/POST ALARM RECORDING
- MPEG-4, MJPEG, H.263 SELECTABLE
- PAN/TILT/ZOOM/FOCUS/PRESET/GROUP CONTROL
- EASY DATA BACK-UP TO AVI FILE
- EASY TRANSFER OF FILES TO BUILT-IN CD-WRITER
- CUSTOM CONFIGURATIONS AVAILABLE

### SPECIFICATIONS

<b>CAMERA INPUT</b>	Max. 16 Channels (Max. 4 Card Expandable) 4 Ch. per card (NTSC / PAL BNC Composite)
<b>MAXIMUM DISPLAY SPEED</b>	480 Frames/sec (NTSC) 400 Frames/sec (PAL)
<b>MAXIMUM RECORDING SPEED</b>	480 Frames/sec (NTSC) 400 Frames/sec (PAL)
<b>SCREEN DIVISION</b>	1, 4, 9, 16
<b>COMPRESSION METHOD</b>	MPEG-4, MJPEG, H.263
<b>DATA SIZE</b>	3-5 KB/Frame Average
<b>RESOLUTION</b>	320x240 (NTSC) 360x288 (PAL)
<b>RECORDING TYPE</b>	Sequence, Scheduled, Motion, Sensor Recording Pre Alarm / Post Alarm Recording
<b>RECORDING SCHEDULE</b>	Scheduled by time, date and camera
<b>AUTHENTICATION SOFTWARE</b>	Yes, watermarked, time-date stamped
<b>MOTION DETECTION</b>	Multi-zones, multi-channels
<b>SENSOR INPUT / CONTROL OUTPUT</b>	Maximum 16 sensors and 16 alarms output control
<b>STORAGE STRUCTURE</b>	Own DB structure
<b>PAN/TILT CONTROL</b>	RS232C (Pan/Tilt/Zoom/Focus/Preset/Group)
<b>AUTO SWITCHING</b>	1, 4, 8 Ch. by time interval
<b>WATCH DOG (FUNCTION)</b>	Auto rebooting
<b>NETWORK</b>	LAN ready, Remote monitoring, recording, searching and Pan/Tilt control anywhere in the world via TCP/IP, IPX, PSTN, ISDN, ADSL, etc.
<b>OPERATING SYSTEM</b>	Microsoft® Windows® XP
<b>TV OUT</b>	A/V monitor
<b>DATA BACKUP</b>	CD-RW included (Removable HDD, DVD, DAT, ZIP, etc. optional)

### STORAGE OPTIONS

VANGUARD VERSION	HARD DRIVE OPTIONS	
4 CHANNEL	80 GB	120 GB
8 CHANNEL	120 GB	240 GB
16 CHANNEL	240 GB	



VANGUARD's easy-to-use interface

*Specifications subject to change without notice*

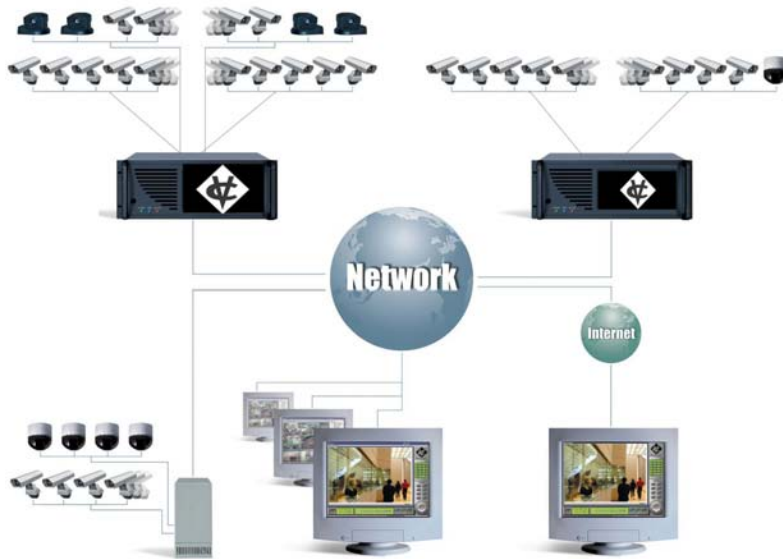


# VELTEK

PRODUCT SPECIFICATIONS

# VANGUARD

80 GB HARD DISK  
CONSUMPTION RATES



## RECORDING TIME CHARTED BY HOURS AND DAYS

FRAME RATE	COMPRESSION TYPE	4 CHANNEL		8 CHANNEL		16 CHANNEL	
		HOURS	DAYS	HOURS	DAYS	HOURS	DAYS
30 fps	MJPEG	16	0.7	8	0.3	4.0	0.2
	MPEG-4	24	1.0	12	0.5	6.0	0.3
	H.263	96	4.0	48	2.0	24.0	1.0
15 fps	MJPEG	32	1.3	16	0.7	8.0	0.3
	MPEG-4	48	2.0	24	1.0	12.0	0.5
	H.263	192	8.0	96	4.0	48.0	2.0
10 fps	MJPEG	48	2.0	24	1.0	12.0	0.5
	MPEG-4	72	3.0	36	1.5	18.0	0.8
	H.263	288	12.0	144	6.0	72.0	3.0
5 fps	MJPEG	96	4.0	48	2.0	24.0	1.0
	MPEG-4	144	6.0	72	3.0	36.0	1.5
	H.263	576	24.0	288	12.0	144.0	6.0
2 fps	MJPEG	240	10.0	120	5.0	60.0	2.5
	MPEG-4	360	15.0	180	7.5	90.0	3.8
	H.263	1440	60.0	720	30.0	360.0	15.0

*These are preliminary findings and are subject to amendment.*

## VANGUARD 120 GB HARD DISK CONSUMPTION RATES

<b>RECORDING TIME CHARTED BY HOURS AND DAYS</b>							
FRAME RATE	COMPRESSION TYPE	4 CHANNEL		8 CHANNEL		16 CHANNEL	
		HOURS	DAYS	HOURS	DAYS	HOURS	DAYS
30 fps	MJPEG	24	1.0	12	0.5	6.0	0.3
	MPEG-4	36	1.5	18	0.8	9.0	0.4
	H.263	144	6.0	72	3.0	36.0	1.5
15 fps	MJPEG	48	2.0	24	1.0	12.0	0.5
	MPEG-4	72	3.0	36	1.5	18.0	0.8
	H.263	288	12.0	144	6.0	72.0	3.0
10 fps	MJPEG	72	3.0	36	1.5	18.0	0.8
	MPEG-4	108	4.5	54	2.3	27.0	1.1
	H.263	432	18.0	216	9.0	108.0	4.5
5 fps	MJPEG	144	6.0	72	3.0	36.0	1.5
	MPEG-4	216	9.0	108	4.5	54.0	2.3
	H.263	864	36.0	432	18.0	216.0	9.0
2 fps	MJPEG	360	15.0	180	7.5	90.0	3.8
	MPEG-4	540	22.5	270	11.3	135.0	5.6
	H.263	2160	90.0	1080	45.0	540.0	22.5

## VANGUARD 240 GB HARD DISK CONSUMPTION RATES

<b>RECORDING TIME CHARTED BY HOURS AND DAYS</b>							
FRAME RATE	COMPRESSION TYPE	4 CHANNEL		8 CHANNEL		16 CHANNEL	
		HOURS	DAYS	HOURS	DAYS	HOURS	DAYS
30 fps	MJPEG	48	2.0	24	1.0	12.0	0.5
	MPEG-4	72	3.0	36	1.5	18.0	0.8
	H.263	288	12.0	144	6.0	72.0	3.0
15 fps	MJPEG	96	4.0	48	2.0	24.0	1.0
	MPEG-4	144	6.0	72	3.0	36.0	1.5
	H.263	576	24.0	288	12.0	144.0	6.0
10 fps	MJPEG	144	6.0	72	3.0	36.0	1.5
	MPEG-4	216	9.0	108	4.5	54.0	2.3
	H.263	864	36.0	432	18.0	216.0	9.0
5 fps	MJPEG	288	12.0	144	6.0	72.0	3.0
	MPEG-4	432	18.0	216	9.0	108.0	4.5
	H.263	1728	72.0	864	36.0	432.0	18.0
2 fps	MJPEG	720	30.0	360	15.0	180.0	7.5
	MPEG-4	1080	45.0	540	22.5	270.0	11.3
	H.263	4320	180.0	2160	90.0	1080.0	45.0