

**SA6416E**

**Affordable hybrid solution; best for mid-sized businesses and small educational facilities**



**Overview**

- Affordable hybrid solution; best for mid-sized businesses and small educational facilities
- 16 channels Video and Audio input with Real-Time recording
- Multiple and configurable channels display on spot monitors
- POS Integration allows for easy association of retail transaction data and corresponding video images
- Lightweight case for minimal shipping cost

## SA6416E Specifications

Operating System	Embedded Windows XP
Disk-on-Module (DOM)	2 GB
Hybrid	Yes - use any combination of IP or Analog inputs
IP Camera Support	Over 100 major IP camera brands supported including Megapixel
Video Format	NTSC
Software Compression	MPEG4 and H.264
Video Output	CCTV or TV monitors
Video Input	16 channels (BNC connectors)
Audio Input	16 channels
Video Loop Output	n/a
Display Rate	480 fps
CIF Recording Frame Rate	480 fps
VGA Recording Frame Rate	240 fps
DVD-RW	Yes - 16 x DVD-RW
Removable HDD Tray	2 HDD tray (up to 3 HDD)
Ethernet	RJ-45, 10/100/1000 Mbps
USB 2.0	Front - 2 ports, Rear - 4 ports
Recording Resolution	up to 720x480
LCD Display	Temperature
Power Consumption	220 Watt
Dimensions (WxHxD)	290 x 160 x 480 mm or approximately 11 x 6 x 19 inches
Rack Mountable	Yes
User Access	Unlimited number of users with individual passwords and tiered user privileges
Sensor/Relay	Built in 4 sensors and 4 relays; Expandable up to 132 sensors and 132 relays via an E-I/O box
WatchDog	Yes - built-in system auto restart after system lock up

### User Interface:

Type	Graphical User Interface
Modes	Compact and Advanced modes
Display Formats	Auto scan with 1, 4, 8, 9, 13 or 16 split screen for monitoring and playback
E-Map Specifications	Store up to 8 maps with up to 8 angles for camera (including name), sensor and relay positions
Night View Ability	Yes
Digital Zoom	Yes
Pan-Tilt-Zoom Control	Control for both IP and Analog cameras
Multiple Languages	Yes
Video Quality Settings	Yes

<b>External Device:</b>	
Dual Monitor Support	Yes
Spot Monitor Support	Yes
POS Integration	Yes
<b>Recording Features:</b>	
Recording Modes	Continuous, Scheduled, Motion Detection, Sensor trigger, Alarm trigger and Smart recording
HDD Size Estimation Tool	Yes - Will estimate HDD size along with recording hours remaining
Video Encryption	Yes
Video Shield	Yes
Video Mask	Yes
Recycle Recording	Yes
Video Loss Detection	Yes
Event Log	Yes
Auto Record after Reboot	Yes
<b>Playback Features:</b>	
Video Search	Yes
<b>Playback Features (cont):</b>	
Watermark Verification	Yes
Playback Software on PC	Yes
Playback Availability	Playback while recording or setup. With Dual Monitors - watch playback and live video simultaneously
Playback Control	Play, rewind or fast-forward footage including frame-by-frame control with real time access
Video Optimization	Digitally zoom in to specific areas on the video footage
Export Functions	Export single frames to BMP files or export video clips to AVI files with time and date stamp
<b>Search Features:</b>	
Visual Search	Yes
Search Criteria's	Search by date, time, camera, event and event logs
Bookmark Function	Yes - Bookmark important footage for fast access
Watermark Verification	Yes
Export Functions	Export single frames to BMP files or export video clips to AVI files
<b>Back-up:</b>	
Back-up features	Manual or schedule backup
Over Heat Detection	Yes
Backup Functions	Built-in DVD-RW or flash memory, RAID, NAS, External HDD and internal SATA (up to 4HDD)

<b>Alarms/Sensors/Relays:</b>	
Alarm Trigger Notifications	E-map - E-map is launched with active camera highlighted and monitoring footage displayed
	FTP - Still images of event footage are automatically saved to specified FTP sites
	Phone - Installed Voice-Fax modem calls specified phone number and plays pre-recorded message
	Relay - Will turn on lights, lock gates, sound an external alarm, etc.
	Record - System will start capturing video footage from different angles on multiple cameras
	Spot Monitor - Will automatically display E-map and event footage on spot monitor
	Text Message - If DVR is SMS modem enabled, then a text will be sent to specified phone number
	CMS3000 - Event information will be automatically generated in the CMS3000 for follow-up
Video Intelligence	Yes
I/O Box Support	Built in 4 sensors and 4 relays; Expandable up to 132 sensors and 132 relays via an E-I/O box
<b>Remote Accessibility:</b>	
Remote Accessibility	WebViewer - 1, 4, 8, 9, 13 or 16 split screen views with PTZ control for hybrid cameras
	PDAViewer - View video footage on a PDA in 1 or 4 split screens
	HandyViewer/SmartViewer- View video footage on compatible cell phones
	CMS3000 - Control and manipulate up to 1000 DVRs remotely; Includes hybrid PTZ and E-Maps
	Remote Console - Remotely monitor, record or playback video footage
Audio	2-way audio communication through WebViewer, Remote Console or CMS3000
Pan-Tilt-Zoom	Yes - Both IP or Analog cameras through WebViewer or CMS3000
Backup	Yes
Dynamic DNS	Yes
Connection Types	Internet or LAN speeds
<b>Video Quality:</b>	
De-Interlacing	Yes for Static or Dynamic footage
Noise Reduction	Yes
Image Balance	Yes - Auto Gain Control (AGC) balance image quality
iEnhance Software	Yes - optimizes recorded video footage
iStable Software	Yes - smoothes video footage
<b>Scheduling Abilities:</b>	

Schedulable Functions	Record, network enable, backup, reboot, alarm and relay controls
Allocations	Functions can be scheduled in 15 minute, 30 minute, 45 minute or 1 hour increments
	Set for a one-time event or on a weekly repeating schedule
<b>Other:</b>	
Attention Please	Yes
Virtual Keyboard	Yes
UPS support	Yes

## Security Product Hardware Recommendation List

### Recommendation List:

**Note:** Based on Intel's suggestion, for all of Microsoft Windows XP Operating Systems, Hyper-Threading must be disabled in the system BIOS Setup program ( [see FAQ for procedure](#) ) for our DVR products.

For the most stable security DVR system, we strongly recommend NOT using VIA/SiS/ALi chipsets and SiS VGA chips with our products due to their severe limitation of the chipset design.

**Note:** Please make sure you are using the standalone VGA card with 128 MB memory above instead of built-in onboard VGA card in order to ensure the working stability and performance of the NV/NX series software.

**Note:** We highly recommend not applying the Samsung Hard disk drive to the SA/XR/EXR DVR products for recording or backing up video files usage.

### SA6416E

PTZ Camera [Please click here for the full IP camera support list](#)

Brand	Product Number
DynaColor	All products
Pelco	Pelco-D
	Pelco-P
Lilin	PIH 717X / 7000 / 7600
Sony	15-CZ45-1
DMP23-H2	DMP23-H2
MD101	all products
CD55	all products
NiceCam	all products
Yoko	all products
DiGiDome	DRX -502A (DOH-240)
SamSung	SCC-641
Canon	VC-C4R
Panasonic	WV-CS850 / WV-CW860
Eastel	all products
MicroJack-P	all products
JVC	TK-C676
Philps	TC8560, TC700
ELMO	PTC -200C
AmericanDynamics_UltraS	all products

USB to Serial Hubs, could be compatible with POS Series, PTZ Camera, and UPS Series

Brand	Product Number
MOXA	Uport 1410

## Raid System

Brand	Product Number
Stardom	SR3610-2S-SB2

### PDA Basic requirement

Notice: This feature is only available on version 5.1 or above AP. For customers who are using 5.0 version of AP, please visit the Support/Download page to download and upgrade to the latest version of AP

1. CPU: Arm architecture, for example, Intel Xscale.
2. OS: Microsoft Window Pocket PC 2002/2003 or Mobile 5 above.
3. GPRS or WLAN module is recommended.

### Windows Mobile Smartphone Basic Requirement

Notice: This feature is only available on version 5.7 or above AP. For customers who are using v.5.5, v5.1 or v5.0 version of AP please visit the Support/Download page to download and upgrade to the latest version of AP

1. CPU: Arm architecture, for example, Intel Xscale.
2. OS: Windows-base, Windows Mobile 2002/2003 for Smart Phone Edition or Windows Mobile version.
3. Network module such as WAP,GPRS,WLAN....etc is required .

### Symbian Smartphone Basic Requirement

Notice: This feature is only available on version 7.1 or above AP. For customers who are using v5.7, v.5.5, v5.1 or v5.0 version of AP please visit the Support/Download page to download and upgrade to the latest version of AP

1. OS:Symbian Smartphone
2. The OS need to support JAVA MIDP 2.0(JAVA2 ME)
3. Network module such as WAP, GPRS, WLAN ...etc is required.