

## NVR-16 Rack Mount Hybrid Windows DVR

3U Rack  
Mountable



### Model Number(s):

- NVR-16 - 16 channel solution

### Key Points:

- 16-CH video and audio
- Supports all major IP camera brands
- H.264 compression
- IP and Analog PTZ camera support
- Supports up to 5 MegaPixel
- Advanced alarm management
- Comprehensive remote access integration



The 16-CH hybrid NVR-16 RACK is a full-featured mid-range DVR that is designed for enterprise security deployments that require exceptional resolution, high recording rates, comprehensive features and flexible network capabilities.

From enhanced alarm management features, integrated Video Intelligence, robust remote command functionality and efficient forensic tools, the NVR-16 RACK is performance, reliability, integration and value in one smart DVR.

### ADMINISTRATION

- Video Format: NTSC
- 16 channels with 352 x 240 (CIF), 640 x 480 (VGA), 720 x 480 (D1) resolutions
- Frame rates: 480 fps (CIF), 240 fps (VGA) and 160 fps (D1)
- Video compression: Software H.264 and MPEG4 compressions
- Supports all major IP camera brands and compatible with up to 5 MegaPixel IP camera(s) (check support list for integrated camera model numbers)
- IP/Analog camera Pan-Tilt-Zoom enabled; script available for adding new protocols
- Supports up to 1920 x 1200 wide screen resolutions
- Uncomplicated system and/or IP camera support updates through USB
- Virtual keyboard built-in and support's UPS
- Estimation tool for HDD storage space availability

### CONFIGURATION

- Pre-schedule many system functionalities including recording, backup, reboot, alarm and relay controls as a one-time or recurring weekly task
- Save time on multiple system setups by simply exporting and importing system configuration settings

# CAPABILITIES

## MONITORING

For environments that depend on live video, the NVR-16 offers many features for fast and responsive event management:

- Video - 16 analog (BNC Connectors) and /or IP cameras
- Audio - 16 channel in and 1 channel out
- Spot Monitor - Analog AND IP video transmission; user can select any combination of channels to output with auto scan and 1, 4, 8, 9, 13 and 16 screen split modes
- 4 sensors & relays and up to 128 more with addt'l E-I/O box
- E-maps (8) showcasing camera, sensor and relay positions
- Simultaneously view live video during playback
- Integrated Auto Gain Control (AGC) balances image noise

### *Live Display*

- Award winning Graphical User Interface (GUI) with:
  - Advanced GUI mode for easy access to system tools
  - Compact GUI mode for maximum image display
- Channel Auto scan with 1, 4, 8, 9, 13 & 16 screen splits
- Digital zoom incorporated for greater detail in live video
- Noise reduction filter enabled for crisper images

### *Alarm/Notifications*

The NVR-16 is ready for real-time incident response by:

- Starting video recording on multiple cameras
- Sending footage to spot monitor
- Enabling camera PTZ tracking and enlarging triggered video
- Following sensor with relay protocols (e.g. locking gates etc.)
- Launching the triggered channel's corresponding Emap
- Sending emails, snapshots and files to FTP, SMS/MMS
- Making a phone call or playing customizable warning sounds
- Sending video to Central Management System
- Displaying standard operational protocols to ensure proper adherence to procedures by security personnel

## INTELLIGENCE

To reduce security staffing and/or to manage high-volume video, the NVR-16 also provides intelligence that is triggered by:

- Motion Detection
- Objects left or removed from monitored zones
- Sensor inputs
- Point-of-Sale events
- Video loss or HDD failure; initiates "Watchdog" function if needed to bring system back from faulty to normal operation

## RECORDING

Once the system is triggered and starts recording, it can continue to do so without time limitations. Additional features:

- Continuous, Motion, Event, or Audio recording
- Smart - Activity based escalation of recording fps (low - high)
- Video Mask - prevent high activity regions from triggering motion based recording
- Video Shield - prevent recording of unwanted or restricted areas by portioning off areas with an opaque digital shield
- System will auto recycle storage space when disk is full
- Two types of de-interlace method (for analog caeras): optimized for static scenes or dynamic scenes

## INTEGRATION

- POS is integrated on every channel along with POS database, advanced data search and keywords that can trigger alarms

## FORENSICS

For rapid retrieval/export of pertinent data the NVR-16 provides:

### *Search*

- Defined parameter search by date, time, camera, area, event, and event log file
- Visual Search that visually breaks down video by day, hour, minute, 10 seconds and second
- Time search to scroll through by moments
- Easy retrieval and playback of footage by "Bookmarking" significant segments
- Advanced event log search by event, operation, POS, system and network activities

### *Playback*

- Simultaneously view up-to-10 minutes of instant playback by clicking the playback icon on live video
- Built-in sensitive playback controls (including frame-by-frame)
- Digital zoom incorporated for greater detail in playback video
- System can save up-to-10 seconds of pre-alarm footage from temporary to permanent storage

### *Backup*

- Easily export/backup to DVR-RW/ CD-RW, flash memory, external HDD, NAS, SAN and RAID
- iBackup software ensures easy backup and playback
- System starts automatic back up of footage when external storage devices are inserted
- Direct burn to CD/DVD-RW during backup
- Export single images to BMP files or segments to AVI files
- Saved images are "Watermarked" to validate authenticity

# CAPABILITIES

## REMOTE

### *Multicasting*

- iDispatch - For high-traffic video broadcasting, the NVR-16 will multicast video streams to drastically lower network, server and camera loads for effective remote viewing

### *Bandwidth*

- For bandwidth considerations, connection speed of 64K, 512K or LAN can be preset by Account Administrator; if not set, user can select any speed of their choosing

### *Setup and configuration*

- iSetup is bundled to make system changes remotely
- Remote backup capability is included with the NVR-16

### *Viewing*

From laptops, cells phones, PDAs and more, you can track video whenever and wherever

- WebViewer, PDAViewer, JavaViewer, SmartViewers & Remote Console
- Control PTZ, setup, Emaps, recording, playback, sensors and relays - ALL REMOTELY
- 2-way audio communication capacity

### *Multiple Systems*

- With NVR-CMS central management software, you have total command of up to 1000 remote systems from one location

## USER ACCESS

- Up to 32 user accounts with individually assigned passwords and user privileges

## Model Numbers

Part #'s	Description
NVR-16	Network Video Recorder 16CH, NO Hard Drive, DVD-R
NVR-16-1TB	Network Video Recorder 16CH, 1TB, DVD-R
NVR-16-2TB	Network Video Recorder 16CH, 2TB, DVD-R
NVR-16-4TB	Network Video Recorder 16CH, 4TB, DVD-R
NVR-16-6TB	Network Video Recorder 16CH, 6TB, DVD-R
NVR-16-8TB	Network Video Recorder 16CH, 8TB, DVD-R

## NVR-16 RACK Detailed Specifications

Front Panel Connections			
Front panel controls	Power switch, Removeable HDD		
DVD writer	Included, supported medias: DVD±R, DVD±RW		
USB 2.0	2		
Rear Panel Connections			
Video (analog)	16 - BNC Connectors		
Video (IP cameras)	16 IP H.264/MPEG4/MJPEG data streams		
Video Output	1 - VGA out, 1 - DVI out, 1 - TV out		
Audio Input/Output	16/1		
Microphone Input	1		
Alarm Inputs/Relay Outputs	4/4		
E-SATA	1		
USB 2.0	4		
Communication	1x - RS232, 1x - RS485		
AC Power	350 Watt		
Unit			
Operating system	Embedded Windows XP 32bit		
Compression	Software: H.264/MPEG4/MJPEG		
Video Format	Analog	NTSC: 352 x 240 (CIF), 640 x 480 (VGA), 720 x 480 (D1)	
	IP	IP/Megapixel Camera Specific	
Recording Rates	Analog	CIF	480fps
		VGA	240fps
		D1	160fps
	IP	Per camera specifications	
Storage	Capacity	Supports up to 4 SATA HDDs (3 Internal, 1 Removable)	
	eSATA	1 eSATA connector, Support eSATA RAID	
Communication Ports	RS 485	1, Terminal block, Tx+, Tx-, Rx+, Rx-	
	RS 232	1, 9 Pin, Male	
Networking	1, 10/100/1000 Base-T Ethernet, RJ-45		
Supported IP cameras (support IP PTZ, IP IO, & IP audio if IP cameras built-in)	AXIS, Panasonic, SONY, LUXON VIDEO, Arecont, BOSCH, IQinvision, JVC, TOSHIBA, VIVOTEK, ACTi, D-Link, PiXORD, PELCO, Apron, Lilin and more		
Operator Interface	USB mouse, USB PC keyboard, Remote controller (supports optional IR extension cable)		
Browser/Remote Client	MS Internet Explorer 6+, Windows 2000, XP, VISTA		
Mechanical			
Dimensions (H x W x D)	5.23 x 18.97 x 20.82in		
Weight			
3U Rack Mountable	Optional rack ears		

Software		
Interface	Graphical user Interface	
Account Administration	Up to 256 accounts with configurable user privileges	
Camera Administration	Add and configure all supported IP/Megapixel cameras through the GUI.	
PTZ Control	Zoom-in/Zoom-out, Focus-in/Focus-out, Direction, Speed, Preset point, Autopan.	
Playback Administration	Playback while recording or setup	
	Play, rewind, fast-forward, frame-by-frame control	
	Digitally zoom to specific regions on recorded video	
	Export single frame to .jpg, export video clip to .DVR	
Motion Detection	Configurable to sense mass/motion; can partition off areas in monitoring regions from motion triggers	
Event Recording	Schedule: Continuous, Smart, Motion, Alarm, Manual	
Video Event Search	Visual Search, date/time, camera, event & log files	
Advanced Event Log	Full event, operation, system & network activities log	
Alarm Notifications	Launch or send E-map, relay, video capture, NVR-CMS or E-mail notification	
E-map Display	Positions of cameras, sensors, relays and event status	
iEnhance	Enhance video quality such as Brightness/Contrast/Hue/ Saturation/ Sharpness/ Noise Reduction/De-interlace/ Gray Scale of recorded video	
iStable	One-click fix for shaky video caused by camera movement (such as wind or vandalism)	
Remote Management		
Central Management	NVR-CMS software - supports up to 1000 DVRs	
Remote DVR connectivity	WebViewer (MS Internet Explorer only), Remote Console, JavaViewer, PDAViewer	
Dispatch Server	Balance NVR communication for added client access and greater data transfer speeds	
DDNS	Allow remote clients to search dynamic servers without enquiring for server's IP address	
Environmental		
Temperature	Operating	32 ° to 104 °F
	Storage	-22°F to 140 °F
Relative humidity	Operating	50%-80%
	Stored	90%
Regulatory		
Emissions	FCC: Part 15, Class A	
Warranty		
2 Year Limited Parts and Labor		