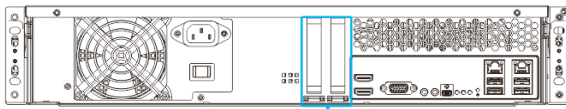# NVR5408/5412/5416A1

Enterprise Megapixel RAID NVR

- Maximum 96 CH Megapixel Recording (Up to 5MP or Above)
- Up to 576Mbps Recording Throughput
- Support 8/12/16-bay Hot-Swappable SATA Hard Disk
- SAS JBOD and iSCSI Storage Expansion
- NVR5408A1/NVR5412A1 Support 14x 2U 12-bay JBOD (total 180HDDs) or 5x 4U 60-bay JBOD (total 312HDDs)
- NVR5416A1 Support 14x 3U 16-bay JBOD (total 240HDDs) or 5x 4U 60-bay JBOD (total 316HDDs)
- Enterprise Hardware RAID Function for Data Protection
- Built-in Enterprise VMS & Real-Time Video Intelligence
- Support Web-based System Maintenance Tool (SurveOne)
- Scalable Client-Server Architecture
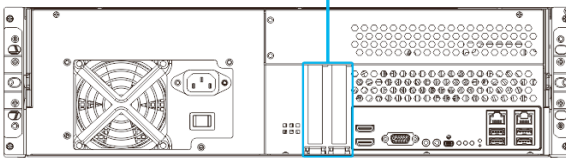
Software Specifications

Live View	• Real-time network camera discovery • Versatile views of various screen divisions • Multiple views supported • View patrolling for single or multiple views • Real time video/event alarm monitoring • Support 3 installation modes and 5 different fisheye dewarp display modes • Support live audio
eMAP	• Drag-n-drop camera manipulation • Hierarchical and multiple layer map structure • Real time event alert • Instant live video of camera
PTZ	• Pan, tilt, and zoom operations (depends on camera) • Built-in PTZ control panel • Preset position (depends on camera) • Event-driven camera patrolling • Support OnScreen PTZ
I/O	• Digital I/O management • Support Ethernet Digital I/O Controller
Multiple Displays	• Supports live view, playback, eMap functions (depends on product)
Investigation	• Search by date, time, and camera • Search by VI event combinations • Search over multiple days • Search over multiple cameras • Different colored recording indicator on calendar • Search via built-in VI analyzer • Intuitive, video thumbnail search results • Cue-in, cue-out and loop playback • Quick playback by video thumbnails • 1/8, 1/4, 1/2, 1x, 2x, 4x, 8x play, pause, stop • AVI-formatted video clip export • Up to 16 channel synchronized playback (depends on product) • Support 3 installation modes and 5 different fisheye dewarp playback display modes
Video Intelligence	Yes
Recording Policy	• Supports up to 96 channels megapixel recording (depends on product) • Continuous recording • Event-driven recording along with rules • Scheduled recording on daily or weekday basis • Post alarm recording 1-300 seconds • Pre-alarm recording 1-300 seconds • Support individual schedule recording

Rule Manager	• Conditional recording/alert/notification • Email, FTP, SMS, popup window, PTZ,VI Panel, Relay output notifications • Sound, alarm, round-the-clock alerts • Support email template
Remote Management	• Remote operation & management via VMS Client • Remote management and control via SCC & SCC Client
Remote Client	• Web Client • iPhone client • Android Client
3rd Party IPCAM	• ACTi, Arecont Vision, Axis, Dahua, Dynacolor, Hikvision, IQinvision, Mobotix, Panasonic, and more
Storage Expansion	• Built-in RAID storage management • Recording to iSCSI/NAS • Backup to iSCSI/NAS
General & Misc.	• Video privacy mask • Digital zoom in, zoom out • Log viewer, log export mechanism • Client auto login • Automatic storage recycling • Client-server architecture • Customized authority account management • Digital watermark proofing • Support DDNS function • Support time synchronization with NTP server • Provide System and VI setup Help assistance • Support Customized Event management and log mechanism • Auto port mapping for internet connection • Support batch setting IPCAM parameters • Support Health Check function • Support standby recording (Failover) • Support offline recording with Surveon cameras • Support APC SMART-UPS
Language	Support multiple language on VMS including English, Czech, Dutch, French, German, Italian, Japanese, Korean, Persian, Polski, Portuguese, Russian, Slovak, Spanish, Turkish, Simplified Chinese, Traditional Chinese
Supported Protocols	IPv4, TCP, UDP, DHCP, NTP, DDNS, SMTP, SNMP, FTP, HTTP, UPnP, RTSP, iSCSI

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Surveon
Complete Megapixel Solutions

NVR5408/5412/5416A1

Enterprise Megapixel RAID NVR
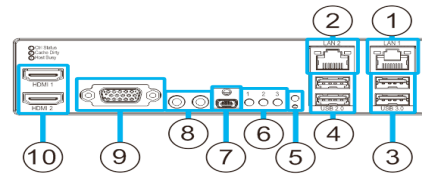
Network Video Recorder

Rear-view

NVR5408/5412

NVR5416

⑪ SAS HBA card port

1	1x 1 Gb/s Ethernet
2	1x 1 Gb/s Ethernet (WOL)
3	2 x USB 3.0
4	2 x USB 2.0
5	1x Reset to default button
6	3x Status LED
7	1x miniUSB (Debug only)
8	1x 3.5 mm microphone and headphone jack
9	1x D-Sub VGA (Res: 1920 x1080@60Hz)
10	2x HDMI (Res: 1920 x1080@60Hz)

Hardware Specifications

NVR5400 Series	
System Processor	Intel® Xeon E3 Quad Core 3.2GHz
System Memory	DDR3 16GB (up to 32GB)
Operating System	2.5" HDD with Linux Embedded System
Storage	12/16 x 3.5" SATAII/SATAIII hard disk drives
I/O Interface	• RJ-45 Gigabit Ethernet x 2 • USB 2.0 x 2 (rear) • USB 3.0 x 2 (rear) • VGA x 1, HDMI x 2 (Only support single monitor at the same time) • Mic. In port x1 • Speaker out port x 1
RAID	0, 1, 5, 6, 10, 50, 60, 1+Spare, 5+Spare, 6+Spare
Electrical	Single PSU (500 watts)
Operating Environment	• Humidity: 5% to 80% (non-condensing) • Temperature: 5º to 40ºC
LED Indicator	Yes
Dimensions	• NVR5412A1: 2U 19-inch rackmount with chassis ears: (H)88.00mm x (W)447.40mm x (L)524.41mm • NVR5416A1: 3U 19-inch rackmount with chassis ears: (H)130.00mm x (W)447.40mm x (L)524.20mm
Weight	• NVR5412A1: 13.60kg/ 29.98lbs (without HDDs) • NVR5416A1: 21.54kg/ 47.49lbs (without HDDs)
Certification	FCC/CE Class A
Warranty	3 years

SurveOne Specifications

Browser-Based System Status Monitoring	
System Monitoring	• NVR/camera system status overview • NVR device/network/storage real-time status monitoring • Camera real-time status monitoring
Configurations	• Easy NVR/camera configuration copy • Easy NVR/camera configuration backup/restore • Easy camera firmware online upgrade • Easy multiple cameras batch setting
Event Log	• NVR/camera real-time event log information • Critical error/error/warning multi-level event classifications

Ordering Information

Model name	Description
NVR5408A1-32	32 CH, 8 Bay Megapixel H/W RAID NVR
NVR5408A1-48	48 CH, 8 Bay Megapixel H/W RAID NVR
NVR5408A1-64	64 CH, 8 Bay Megapixel H/W RAID NVR
NVR5412A1-16	16 CH, 12 Bay Megapixel H/W RAID NVR
NVR5412A1-24	24 CH, 12 Bay Megapixel H/W RAID NVR
NVR5412A1-32	32 CH, 12 Bay Megapixel H/W RAID NVR
NVR5412A1-48	48 CH, 12 Bay Megapixel H/W RAID NVR
NVR5412A1-64	64 CH, 12 Bay Megapixel H/W RAID NVR
NVR5412A1-96	96 CH, 12 Bay Megapixel H/W RAID NVR
NVR5416A1-16	16 CH, 16 Bay Megapixel H/W RAID NVR
NVR5416A1-24	24 CH, 16 Bay Megapixel H/W RAID NVR
NVR5416A1-32	32 CH, 16 Bay Megapixel H/W RAID NVR
NVR5416A1-48	48 CH, 16 Bay Megapixel H/W RAID NVR
NVR5416A1-64	64 CH, 16 Bay Megapixel H/W RAID NVR
NVR5416A1-96	96 CH, 16 Bay Megapixel H/W RAID NVR

Optional Accessories

Part Number	Description
ZJOYSTICK-0050	CH Products, IP Desktop USB Joystick. 3 axes joysticks for P/T control, 12 HID buttons, USB 1.1 HID compliant, Easy to use and operate.
ZETHIOBOX-0030	Ethernet I/O Box, Ethernet Digital I/O Controller, Digital Input x6, Digital Output x3 (for VMS 2.4.8)
ZPOE08-0030	8 Port 10/100Mbps 120W PoE Switch
ZPOE26-0030	24 Port 10/100Mbps + 2 Port GBE Combo (UTP/SFP) 380W PoE Switch
HELH72A3200-00301	Hitachi, Enterprise, 2TB SATA HDD, 6Gb/s
HELH72A3400-00301	Hitachi, Enterprise, 4TB SATA HDD, 6Gb/s
HELH72A3600-00301	HGST Enterprise 3.5" SATA 6Gb/s HDD, 6TB, 7200RPM
HELH72A3800-00301	HGST Enterprise 3.5" SATA 6Gb/s HDD, 8TB, 7200RPM
HSLS72A3600-00301	Seagate Surveillance 3.5" SATA 6Gb/s HDD, 6TB
HSLS72A3800-00301	Seagate Surveillance 3.5" SATA 6Gb/s HDD, 8TB

*   All specifications are subject to change without notice.
*   All brand names and registered trademarks are the property of their respective owners.

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