

# NVR5408/5412/5416E1

## Enterprise Megapixel RAID NVR



- Maximum 64 CH Megapixel Recording (Up to 5MP or Above)<sup>#</sup>
- Up to 384Mbps Recording Throughput
- Support 8/12/16-bay Hot-Swappable SATA Hard Disk
- iSCSI and SAS JBOD Storage Expansion (Optional)
- NVR5408/5412 Support 14x 2U 12-bay JBOD (total 180HDDs) or 5x 4U 60-bay JBOD (total 312HDDs) (Optional)
- NVR5416 Support 14x 3U 16-bay JBOD (total 240HDDs) or 5x 4U 60-bay JBOD (total 316HDDs) (Optional)
- 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

<sup>#</sup>Under maximum recording mode with 16GB memory size

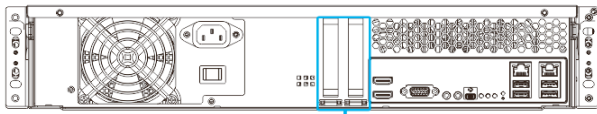
### Software Specifications

Live View	<ul style="list-style-type: none"> <li>• Real-time network camera discovery</li> <li>• Versatile views of various screen divisions</li> <li>• Multiple views supported</li> <li>• View patrolling for single or multiple views</li> <li>• Real time video/event alarm monitoring</li> <li>• Support 3 installation modes and 5 different fisheye dewarp display modes</li> <li>• Support live audio</li> </ul>	Rule Manager	<ul style="list-style-type: none"> <li>• Conditional recording/alert/notification</li> <li>• Email, FTP, SMS, popup window, PTZ,VI Panel, Relay output notifications</li> <li>• Sound, alarm, round-the-clock alerts</li> <li>• Support email template</li> </ul>
eMAP	<ul style="list-style-type: none"> <li>• Drag-n-drop camera manipulation</li> <li>• Hierarchical and multiple layer map structure</li> <li>• Real time event alert</li> <li>• Instant live video of camera</li> </ul>	Remote Management	<ul style="list-style-type: none"> <li>• Remote operation &amp; management via VMS Client</li> <li>• Remote management and control via SCC &amp; SCC Client</li> </ul>
PTZ	<ul style="list-style-type: none"> <li>• Pan, tilt, and zoom operations (depends on camera)</li> <li>• Built-in PTZ control panel</li> <li>• Preset position (depends on camera)</li> <li>• Event-driven camera patrolling</li> <li>• Support OnScreen PTZ</li> </ul>	Remote Client	<ul style="list-style-type: none"> <li>• Web Client • iPhone client • Android Client</li> </ul>
I/O	<ul style="list-style-type: none"> <li>• Digital I/O management</li> <li>• Support Ethernet Digital I/O Controller</li> </ul>	3rd Party IPCAM	<ul style="list-style-type: none"> <li>• ACTi, Arecont Vision, Axis, Dahua, Dynacolor, Hikvision, IQinvision, Mobotix, Panasonic, and more</li> </ul>
Multiple Displays	<ul style="list-style-type: none"> <li>• Supports live view, playback, eMap functions (depends on product)</li> </ul>	Storage Expansion	<ul style="list-style-type: none"> <li>• Built-in RAID storage management</li> <li>• Recording to iSCSI/NAS</li> <li>• Backup to iSCSI/NAS</li> </ul>
Investigation	<ul style="list-style-type: none"> <li>• Search by date, time, and camera</li> <li>• Search by VI event combinations</li> <li>• Search over multiple days</li> <li>• Search over multiple cameras</li> <li>• Different colored recording indicator on calendar</li> <li>• Search via built-in VI analyzer</li> <li>• Intuitive, video thumbnail search results</li> <li>• Cue-in, cue-out and loop playback</li> <li>• Quick playback by video thumbnails</li> <li>• 1/8, 1/4, 1/2, 1x, 2x, 4x, 8x play, pause, stop</li> <li>• AVI-formatted video clip export</li> <li>• Up to 16 channel synchronized playback (depends on product)</li> <li>• Support 3 installation modes and 5 different fisheye dewarp playback display modes</li> </ul>	General & Misc.	<ul style="list-style-type: none"> <li>• Video privacy mask</li> <li>• Digital zoom in, zoom out</li> <li>• Log viewer, log export mechanism</li> <li>• Client auto login</li> <li>• Automatic storage recycling</li> <li>• Client-server architecture</li> <li>• Customized authority account management</li> <li>• Digital watermark proofing</li> <li>• Support DDNS function</li> <li>• Support time synchronization with NTP server</li> <li>• Provide System and VI setup Help assistance</li> <li>• Support Customized Event management and log mechanism</li> <li>• Auto port mapping for internet connection</li> <li>• Support batch setting IPCAM parameters</li> <li>• Support Health Check function</li> <li>• Support standby recording (Failover)</li> <li>• Support offline recording with Surveon cameras</li> <li>• Support APC SMART-UPS</li> </ul>
Video Intelligence	Yes	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
Recording Policy	<ul style="list-style-type: none"> <li>• Supports up to 64 channels megapixel recording (depends on product)</li> <li>• Continuous recording</li> <li>• Event-driven recording along with rules</li> <li>• Scheduled recording on daily or weekday basis</li> <li>• Post alarm recording 1-300 seconds</li> <li>• Pre-alarm recording 1-300 seconds</li> <li>• Support individual schedule recording</li> </ul>	Supported Protocols	IPv4, TCP, UDP, DHCP, NTP, DDNS, SMTP, SNMP, FTP, HTTP, UPnP, RTSP, iSCSI

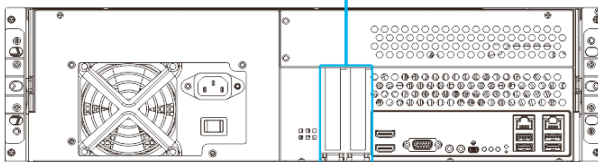
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### Rear-view

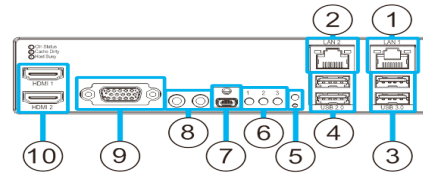
NVR5408/5412



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® Core i3 Dual Core 3.5GHz
System Memory	DDR3 8GB (up to 32GB)
Operating System	2.5" HDD with Linux Embedded System
Storage	8/12/16 x 3.5" SATAII/SATAIII hard disk drives
I/O Interface	<ul style="list-style-type: none"> <li>RJ-45 Gigabit Ethernet x 2</li> <li>USB 2.0 x 2 (rear)</li> <li>USB 3.0 x 2 (rear)</li> <li>VGA x 1, HDMI x 2 (Only support single monitor at the same time)</li> <li>Mic. In port x1</li> <li>Speaker out port x 1</li> </ul>
RAID	0, 1, 5, 6, 10, 50, 60, 1+Spare, 5+Spare, 6+Spare
Electrical	Single PSU (500 watts)
Operating Environment	<ul style="list-style-type: none"> <li>Humidity: 5% to 80% (non-condensing)</li> <li>Temperature: 5° to 40°C</li> </ul>
LED Indicator	Yes
Dimensions	<ul style="list-style-type: none"> <li>NVR5408E1: 2U 19-inch rackmount with chassis ears: (H)88.00mm x (W)447.40mm x (L)524.41mm</li> <li>NVR5412E1: 2U 19-inch rackmount with chassis ears: (H)88.00mm x (W)447.40mm x (L)524.41mm</li> <li>NVR5416E1: 3U 19-inch rackmount with chassis ears: (H)130.00mm x (W)447.40mm x (L)524.20mm</li> </ul>
Weight	<ul style="list-style-type: none"> <li>NVR5408E1: 13.60kg/ 29.98lbs (without HDDs, without rackmount slide rail)</li> <li>NVR5412E1: 13.60kg/ 29.98lbs (without HDDs)</li> <li>NVR5416E1: 21.54kg/ 47.49lbs (without HDDs)</li> </ul>
Certification	FCC/CE Class A
Warranty	3 years

### SurveOne Specifications

Browser-Based System Status Monitoring	
System Monitoring	<ul style="list-style-type: none"> <li>NVR/camera system status overview</li> <li>NVR device/network/storage real-time status monitoring</li> <li>Camera real-time status monitoring</li> </ul>
Configurations	<ul style="list-style-type: none"> <li>Easy NVR/camera configuration copy</li> <li>Easy NVR/camera configuration backup/restore</li> <li>Easy camera firmware online upgrade</li> <li>Easy multiple cameras batch setting</li> </ul>
Event Log	<ul style="list-style-type: none"> <li>NVR/camera real-time event log information</li> <li>Critical error/error/warning multi-level event classifications</li> </ul>

### Ordering Information

Model name	Description
NVR5408E1-16	16 CH, 8 Bay Megapixel H/W RAID NVR
NVR5408E1-24	24 CH, 8 Bay Megapixel H/W RAID NVR
NVR5408E1-32	32 CH, 8 Bay Megapixel H/W RAID NVR
NVR5412E1-16	16 CH, 12 Bay Megapixel H/W RAID NVR
NVR5412E1-24	24 CH, 12 Bay Megapixel H/W RAID NVR
NVR5412E1-32	32 CH, 12 Bay Megapixel H/W RAID NVR
NVR5412E1-48	48 CH, 12 Bay Megapixel H/W RAID NVR
NVR5412E1-64	64 CH, 12 Bay Megapixel H/W RAID NVR
NVR5416E1-16	16 CH, 16 Bay Megapixel H/W RAID NVR
NVR5416E1-24	24 CH, 16 Bay Megapixel H/W RAID NVR
NVR5416E1-32	32 CH, 16 Bay Megapixel H/W RAID NVR
NVR5416E1-48	48 CH, 16 Bay Megapixel H/W RAID NVR
NVR5416E1-64	64 CH, 16 Bay Megapixel H/W RAID NVR

### Optional Accessories

Part Number	Description
BH1LSS210-0010	SAS JBOD External Card for NVR54xx series
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
HSL572A3600-00301	Seagate Surveillance 3.5" SATA 6Gb/s HDD, 6TB
HSL572A3800-00301	Seagate Surveillance 3.5" SATA 6Gb/s HDD, 8TB

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