

# NVR5412/5416

## Enterprise Megapixel RAID NVR



- Maximum 96 CH Megapixel Recording (Up to 5MP or Above)
- Support 12/16-bay Hot-Swappable SATA Hard Disk
- SAS JBOD and iSCSI Storage Expansion
- NVR5412 Support 14x 2U 12-bay JBOD (total 180HDDs) or 5x 4U 60-bay JBOD (total 312HDDs)
- NVR5416 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	<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>	Recording Policy	<ul style="list-style-type: none"> <li>• Supports up to 96 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>
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>	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>
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 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>
I/O	<ul style="list-style-type: none"> <li>• Digital I/O management</li> <li>• Support Ethernet Digital I/O Controller</li> </ul>	Remote Client	<ul style="list-style-type: none"> <li>• Web Client • iPhone client • Android Client</li> </ul>
Multiple Displays	<ul style="list-style-type: none"> <li>• Supports live view, playback, eMap functions (depends on product)</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>
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>	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>
Video Intelligence	Yes	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>
		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

# NVR5412/5416

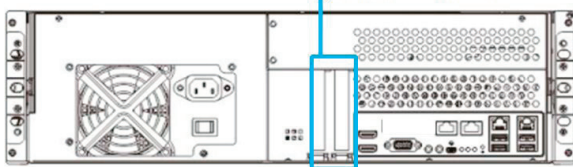
## Enterprise Megapixel RAID NVR

### Rear-view

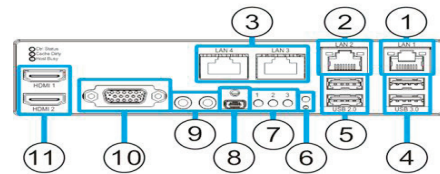
NVR5412



NVR5416



13 SAS HBA card port



1	1x 1 Gb/s Ethernet
2	1x 1 Gb/s Ethernet (WOL)
3	2x 1 Gb/s Ethernet
4	2x USB 3.0
5	2x USB 2.0
6	1x Reset to default button
7	3x Status LED
8	1x miniUSB (Debug only)
9	1x 3.5 mm microphone and headphone jack
10	1x D-Sub VGA (Res: 1920 x1080@60Hz)
11	2x HDMI (Res: 1920 x1080@60Hz)

### Hardware Specifications

NVR5400 Series	
System Processor	Intel® Core i3 Dual Core 3.5GHz 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	<ul style="list-style-type: none"> <li>RJ-45 Gigabit Ethernet x 4</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	1, 5, 6, 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>NVR5412: 2U 19-inch rackmount with chassis ears: (H)88.00mm x (W)447.40mm x (L)524.41mm</li> <li>NVR5416: 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>NVR5412: 13.60kg/ 29.98lbs (without HDDs)</li> <li>NVR5416: 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
NVR5412/5416A1-16	16 CH, 12/16 Bay Megapixel H/W RAID NVR
NVR5412/5416A1-24	24 CH, 12/16 Bay Megapixel H/W RAID NVR
NVR5412/5416A1-32	32 CH, 12/16 Bay Megapixel H/W RAID NVR
NVR5412/5416A1-48	48 CH, 12/16 Bay Megapixel H/W RAID NVR
NVR5412/5416A1-64	64 CH, 12/16 Bay Megapixel H/W RAID NVR
NVR5412/5416A1-96	96 CH, 12/16 Bay Megapixel H/W RAID NVR
NVR5412/5416E1-16	16 CH, 12/16 Bay Megapixel H/W RAID NVR
NVR5412/5416E1-24	24 CH, 12/16 Bay Megapixel H/W RAID NVR
NVR5412/5416E1-32	32 CH, 12/16 Bay Megapixel H/W RAID NVR
NVR5412/5416E1-48	48 CH, 12/16 Bay Megapixel H/W RAID NVR
NVR5412/5416E1-64	64 CH, 12/16 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
H72A1XA3XXX-0030	Hitachi, Enterprise, 2TB SATA HDD, 6Gb/s
H72A2XA2XXX-0030	Hitachi, Enterprise, 3TB SATA HDD, 6Gb/s
H72A3XA3XX1-0030	Hitachi, Enterprise, 4TB SATA HDD, 6Gb/s
HSLT72A3200-00301	Toshiba, Desktop, 2TB Surveillance SATA HDD, 6Gb/s
HSLT72A3300-00301	Toshiba, Desktop, 3TB Surveillance SATA HDD, 6Gb/s
HSLT72A3400-00301	Toshiba, Desktop, 4TB Surveillance SATA HDD, 6Gb/s

\* All specifications are subject to change without notice.  
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