NVR2104 Series

Enterprise Megapixel RAID NVR



- Maximum 64 CH Megapixel Recording (up to 5MP or above)
- Enterprise-Grade RAID Subsystem
- Expandable to Maximum 448TB
- DAS and iSCSI SAN Supported
- Scalable Client-Server Architecture
- Up to 64 CH Real-time VI Detection
- Support Web-based System Maintenance Tool (SurveOne)





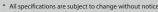


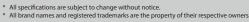




Software Specifications

Video Intelligence Neat Immediace/went alarm display Instant playback Video City Debokmarking Support of Support Sup	Live View	 Real time video/event alarm display Instant playback Video clip bookmarking Support 3 installation modes and 5 different fisheye Dewarp display modes Support PAP(picture in picture) Display 	Instant Playback	Supported in video alarm, event alarm, view functions Pre-defined playback durations Video clip bookmarking
Intstant playback Video clip bookmarking Support 3 installation modes and 5 different fisheye Dewarp display modes Support PAP(picture in picture) Display Support 2 way audio Directional camera display Hierarchical map structure - Real time event alert - Instant live video of camera Bulli-in, floating PTZ control panel PTZ PTZ Panel, Itz zoom operations (dependent of camera) Scheduled or continuous camera patrolling Feven-driven camera patrolling Support on Screen PTZ with 8 directional virtual control pad Support CH Products USB joystick Support 10 Prosecution Schemans Support Stehemet I/O device Multiple Displays UD Up to 8 monitors Support Stehemet Voldevice Search by Wewent combinations Search by mere defined recent time Search by Wewent combinations Search over multiple cameras Search by Pre-defined recent time Search by Wewent combinations Search over multiple cameras Search by Wewent combinations Search over multiple cameras Search over multiple cameras Search over multiple cameras Search over multiple cameras Search by Wewent combinations Search over multiple cameras Search by Search over multiple cameras Search by Wewent combinations Search over multiple cameras Search by Search over multiple cameras Search by Search over multiple cameras Search by Wewent combinations Search over multiple cameras Search by Search over multiple cameras Search by Search over multiple cameras Search over multiple cameras Search by Search over multiple cameras Search over multiple cameras Search by Search over multiple cameras			Video Intelligence	• Yes
- Drag-n-drop camera manipulation - Directional camera display - Hierarchical map structure - Real time event alert - Instant live video of camera - Multiple layer maps supported PTZ - Pan, tilt, zoom operations (dependent of camera) - Built-in, floating PTZ control panel - Preset position (dependent of camera) - Scheduled or continuous camera patrolling - Event-driven camera patrolling - Support CH Products USB joystick - Support CH Products USB joystick - Digital I/O management - Support Ethernet I/O device - Up to 8 monitors - Support sinder view, playback, eMap functions - Direct display to secondary monitor(s) - Search by date, time, camera - Search by Viewent combinations - Search by Viewent combinations - Search via built-in VI analyzer - Customizable bookmark - Intuitive, video thumbnail - 1/8, 1/4, 1/2, 1x, 2x, 4x, 8x play, pause, stop - AVI-formatted video (pile pxport - Achannel synchronized playback - VI-formatted video (pile pxport - Achannel synchronized playback - Sidifferent time interval scroll bar drag and - for playback - Sidifferent time interval scroll bar drag and - for playback - Sidifferent time interval scroll bar drag and - Protocols - Conditional recording/alert/notifications - Sand, poppor window, PTZ, VI - Panel, Relay output notifications - Sound, alarm, round-the-clock alerts - Seumodal, alm, pround panel - Remote - Management - Whe Client - iPhone client - Android Client - Web Client - iPhone client - Android Client - Web Client - Publ Client - Web Client - iPhone client - Android Client - Web Client - iPhone client - Android Client - Web Client - iPhone client - Android Client - Web Client - iPhone client - Android Client - Web Client - iPhone client - Android Client - Web Client - iPhone client - Android Client - Web Client - iPhone client - Android Client - Web Client - iPhone client - Android Client - Sard Party IPCAM - ACTI, Arecont Vision, Asoni, AvTECH, AXIS, Bosch, Brickcom, Dahua, D-Link, Dyport Client - Android Client - Strage Support Customized Support Support Support			Recording Policy	Continuous recording • Manual recording Event-driven recording along with rules Scheduled recording on daily or weekday basis Post alarm recording 5-45 minutes
PTZ Partitic layer maps supported PTZ Partitic, goom operations (dependent of camera) Bulti-in, floating PTZ control panel Preset position (dependent of camera) Scheduled or continuous camera patrolling Event-driven camera patrolling Support on Screen PTZ with 8 directional virtual control pad Support CH Products USB joystick VO Digital I/O management Support Ethernet I/O device Multiple Displays Investigation Search by date time, camera Search by greame / keep tower multiple cameras Furame by frame / key frame modes playback Video clip bookmarking and commenting Different color display on recorded data date Search via built-in V1 analyzer Customizable bookmark Intuitive, video thumbnail Vigeo thumbnail V		Drag-n-drop camera manipulation Directional camera display Hierarchical map structure Real time event alert Instant live video of camera Multiple layer maps supported	Rule Manager	• Email, FTP, SMS, popup window, PTZ, VI Panel, Relay output notifications
- Built-in, floating PTZ control panel - Preset position (dependent of camera) - Scheduled or continuous camera patrolling - Event-driven camera patrolling - Event-driven camera patrolling - Support or Screen PTZ with 8 directional virtual control pad - Support CH Products USB joystick I/O - Digital I/O management - Support Ethernet I/O device - Up to 8 monitors - Supports live view, playback, eMap functions - Direct display to secondary monitor(s) - Search by date, time, camera - Search by Vale vent combinations - Search by Vale vent combinations - Search over multiple days - Search over multiple days - Search over multiple days - Search via built-in V analyzer - Customizable bookmark - Intuitive, video thumbnail - (In, rue-out and repeat - (Unix playback by video thumbnail - (In, rue-out and repeat - (Unix playback by video thumbnail - (In, rue-out and repeat - (Unix playback by video thumbnail - (In, rue-out and repeat - (Unix playback of clipe export - 4-channel synchronized playback - 5 different time interval scroll bar drag and drop playback - Time by frame, farmen and rage and drop playback - Stifferent time interval scroll bar drag and drop playback - Frame ty frame ty fame ty				
Preset position (dependent of camera) - Scheduled or continuous camera patrolling - Evert-driven camera patrolling - Support on Screen PTZ with 8 directional virtual control pad - Support on Screen PTZ with 8 directional virtual control pad - Support CH Products USB joystick - Digital I/O management - Support Ethernet I/O device - Up to 8 monitors - Supports Infortrend RAID storage - Built-in RAID storage management - Supports live view, playback, eMap functions - Direct display to secondary monitor(s) - Search by date, time, camera - Search by viewent combinations - Search by viewent combinations - Search over multiple days - Search over multiple cameras - Frame by frame / Key frame modes playback - Video clip bookmarking and commenting - Different color display on recorded data date - Search via built-in VI analyzer - Customizable bookmark - Intuitive, video thumbnail search results - Cue-in, cue-out and repeat - Quick playback by video thumbnail - 1/8, 1/4, 1/2, 1x, 2x, 4x, 8x play, pause, stop - AWI-formatted video clip export - 4-channel synchronized playback - S different time interval scroll bar drag and drop playback - S different time interval scroll bar drag and drop playback - S different time interval scroll bar drag and drop playback - S different time interval scroll bar drag and drop playback - S different time interval scroll bar drag and drop playback - S different time interval scroll bar drag and drop playback - S different time interval scroll bar drag and drop playback - S different time interval scroll bar drag and drop playback - S different time interval scroll bar drag and drop playback - S different time interval scroll bar drag and drop playback - S different time interval scroll bar drag and drop playback - S different time interval scroll bar drag and drop playback - S different time interval scroll bar drag and drop playback - S different time interval scroll bar drag and drop playback - S different time interval scroll bar drag and drop playback - S different time interval scroll	ΓIZ		Remote Client	Web Client • iPhone client • Android Client
Digital I/O management Support Ethernet I/O device General & Misc. Image enhancement • Video privacy mask Digital zoom in, zoom out Log viewer, log export mechanism • System lockup Client auto login • Automatic storage recycling Client auto login • Automatic storage recycling Client auto login • Automatic storage recycling Client server architecture Customized authority account management Customized authority account Support Nirtual keyboard Provide System an		Preset position (dependent of camera) Cheduled or continuous camera patrolling Event-driven camera patrolling Support on Screen PTZ with 8 directional virtual	3rd Party IPCAM	Brickcom, Dahua, D-Link, Dynacolor, EDIMAX, EverFocus, Hikvision, IQinvision, Lilin, Messoa, Mobotix, Panasonic, Samsung, Shany, SIMON,
- Support Ethernet I/O device Multiple Displays - Up to 8 monitors - Supports live view, playback, eMap functions - Direct display to secondary monitor(s) Investigation - Search by date, time, camera - Search by U event combinations - Search by I event combinations - Search by I event combinations - Search over multiple days - Search over multiple cameras - Frame by frame / Key frame modes playback - Video clip bookmarking and commenting - Different color display on recorded data date - Search via built-in VI analyzer - Customizable bookmark - Intuitive, video thumbnail search results - Quick playback by video thumbnail - 1/8, 1/4, 1/2, 1x, 2x, 4x, 8x play, pause, stop - ANI-formatted video clip export - 4-channel synchronized playback - 5 different time interval scroll bar drag and drop playback - Supported - Intuitive, Video of the provide of the protocols - Intuitive, video of the provide of the protocols - Intuitive, video of the provide of the protocols - Intuitive, video of the provide of the protocols - Intuitive, video of the provide of the protocols - Intuitive, video of the provide of the protocols - Intuitive, video of the provide of the protocols - Intuitive, video of the provide of the protocols - Intuitive, video of the provide of the protocols - Intuitive, video of the provide of the protocols - Intuitive, video of the provide of the protocols - Intuitive, video of the provide of the protocols - Intuitive, video of the provide of the provide of the provide of the protocols - Intuitive, video of the provide	I/O		Storage Expansion	
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 Cue-in, cue-out and repeat Quick playback by video thumbnail 1/8, 1/4, 1/2, 1x, 2x, 4x, 8x play, pause, stop AVI-formatted video clip export 4-channel synchronized playback 5 different time interval scroll bar drag and drop playback Language Multiple Language supported on VMS and Web Client: English, French, German, Portuguese, Spanish, Simple Chinese, Traditional Chinese, Italian, Japanese, Russian, Slovak, Czech, Dutch and Polish IPv4, TCP, UDP, DHCP, NTP, DDNS, SMTP, SNMP, FTP, HTTP, UPnP, RTSP, iSCSI 	Investigation	Search by pre-defined recent time Search by VI event combinations Search over multiple days Search over multiple cameras Frame by frame / Key frame modes playback Video clip bookmarking and commenting Different color display on recorded data date Search via built-in VI analyzer Customizable bookmark Intuitive, video thumbnail search results Cue-in, cue-out and repeat Quick playback by video thumbnail 1/8, 1/4, 1/2, 1x, 2x, 4x, 8x play, pause, stop AVI-formatted video clip export 4-channel synchronized playback S different time interval scroll bar drag and drop playback		
drop playback Protocols HTTP, UPnP, RTSP, iSCSI			Language	Client: English, French, German, Portuguese, Spanish, Simple Chinese, Traditional Chinese, Italian, Japanese, Russian, Slovak, Czech, Dutch
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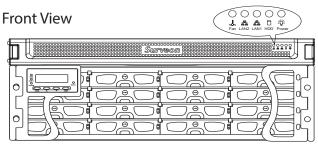
• Support 3 installation modes and 5 different Fisheye Dewarp playback display modes



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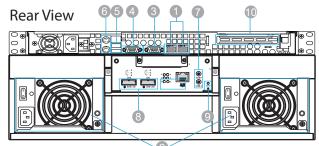
Functions



RAID Subsystem

Hardware Specifications

NVR2100 Head	
System	Client-server architecture, Chassis: 1U 19" Rack
Server Processor	Intel Core i3 @ 3.3 GHz or Intel XEON @ 3.2 GHz
System Memory	4GB, DDRIII-1333 (Up to 32GB)
Operating System	2.5" HDD with Linux Embedded System
I/O Interface	 PS2 Mouse port x1 PS2 Keyboard port x1 USB port x2 Serial Port x1 VGA Port x1 RJ-45: 2x Gigabit Ethernet SAS Expansion port (Option)
Electrical	• Input voltage : 100-240 V, 50-60 Hz, 4.2-1.8 Amp • Power: Single 350 watt AC power
Power Consumption	Rated output power: 350 W
Weight	Gross weight: 16.5 kg (38 lb.)
Dimensions	50.3(W)x 43.7(D)x 4.3(H) cm (19.85 " x 17.2 " x 1.7 ")
Environmental	Temperature: • Operating: 10° C to 35° C (50° F to 95° F) • Non-operating: -40° C to 70° C (-40° F to 158° F) Humidity: • Operating: 8% to 90%, non-condensing • Non-operating: 5% to 95% non-condensing
Certification	CB, FCC / CE Class A, UL60959/ IEC 60950, CCC
RAID Subsystem	
Host Connectivity	1 or 2 SAS 4x wide ports per controller
Drive Connectivity	SAS/SATA-II disk, 12 or 16 drives per system, hot swappable
Form Factor	2~3U, 19 inch rackmount
RAID Functionality	RAID 0, 1 (0+1), 3, 5, 6, 10, 30, 50, 60, hot-spare, online expansion, RAID migration, intelligent drive handling
Environmental	Operating temperature: 5° to 40°C (35°C if battery is applied) Non-operating temperature: - 40° to 60°C Humidity: 5 to 95%, non-condensing
Dimensions	12 Bay: chassis without handles: 446(W) x 88(H) x 490(D) mm; chassis with handles: 482 (W) x 88(H) x 505(D) mm 16 Bay: chassis without handles: 445(W) x 130(H) x 488.2(D) mm; chassis with handles: 482.6(W) x 131(H) x 504.3(D) mm
Weight	Gross weight: 12 Bay:25kg; 16 Bay: 30.5kg
Certification	CE, FCC Class B, BSMI, UL, GOST-R
Warranty	3 years



- 1 2 x Ethernet Port
- Redundant Power SupplyRedundant Thermal Fan
- 3 1 x VGA Port
- 4 1 x Serial Port
- 5 2 x USB Port
- 6 PS2 Keyboard/Mouse Port
- 1 x 3.5mm Microphone4 Headphone Jack
- 8 2 x SAS Expansion Port
- Restore + Default Button
- 10 1 x PCI-E x 8 Slot

Package Content (NVR2100 Head)

Contents	Quantity
NVR2104 Series Network Video Recorder	1
Client Installation CD/DVD	1
Quick Installation Guide	1
Slide Rails	2
Slide Bracket	2
Cable Tie	2
Power Cord	2
RAID Subsystem*	1

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
BH1DLS210-0010	SAS External Card (SAS 6G HBA) for NVR21xxA1 Series, NVR21xxA2 Series
HELH72A3200-00301	HGST, Enterprise, 2TB SATA HDD, 6Gb/s
HELH72A3400-00301	HGST, Enterprise, 4TB SATA HDD, 6Gb/s
HELH72A3600-00301	HGST, Enterprise, 6TB SATA HDD, 6Gb/s
HELH72A3800-00301	HGST, Enterprise, 8TB SATA HDD, 6Gb/s
HELH72S3200-00301	HGST, Enterprise, 2TB SAS HDD, 12Gb/s
HELH72S3400-00301	HGST, Enterprise, 4TB SAS HDD, 12Gb/s
HELH72S3600-00301	HGST, Enterprise, 6TB SAS HDD, 12Gb/s
HELH72S3800-00301	HGST, Enterprise, 8TB SAS HDD, 12Gb/s
HELH72S3T10-00301	HGST, Enterprise, 10TB SAS HDD, 12Gb/s

^{*} Hard disk drives (HDD) are purchased separately. When selecting HDDs, HDD manufacturers always urge users to choose enterprise/surveillance grade drives for 24/7 surveillance operations to ensure system stability. The surveillance hard drives on our Approved Vendor List (AVL) are engineered to work continuously, withstand high-temperature fluctuations and equipment vibrations found in any typical surveillance application. To reduce errors occurred on your RAID data and the chance of the recording performance being affected, it is highly recommended to use HDDs listed on our Approved Vendor List (AVL) to ensure reliability. Find the AVL on our web page: http://www.surveon.com/support/hardware.asp

