

# SMR8040U

40CH Megapixel H/W RAID NVR



- 40 CH Smart Megapixel Video Recorder
- 400Mbps Recording Performance
- Enterprise class RAID-5 system for Highest Data Protection
- 8x Hot-Swappable Hard Disk
- 16 CH Real-time VI Detection
- 1080P Full-HD HW Decoding Engine
- Built-in D-Sub/HDMI for VGA Local Display
- In-House Design & Production
- 3-Year Warranty

Network Video Recorder

## 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>• HTML and image overlays</li> <li>• Multiple views supported</li> <li>• View patrolling for single or multiple views</li> <li>• Real time video/event alarm display</li> <li>• Instant playback</li> <li>• Video clip bookmarking</li> <li>• Support 3 installation modes and 5 different fisheye Dewarp display modes</li> <li>• Support PAP(picture in picture) Display</li> <li>• Support 2 way audio</li> </ul>	Video Intelligence	<ul style="list-style-type: none"> <li>• General motion detection</li> <li>• Camera motion detection</li> <li>• Missing object detection</li> <li>• Foreign object detection</li> <li>• Intrusion detection</li> <li>• Forbidden area detection</li> <li>• Tampering detection</li> <li>• Virtual fence</li> <li>• Object counting</li> <li>• Tailgating detection</li> <li>• Go Out detection</li> </ul>
eMAP	<ul style="list-style-type: none"> <li>• Drag-n-drop camera manipulation</li> <li>• Directional camera display</li> <li>• Hierarchical map structure</li> <li>• Real time event alert</li> <li>• Instant live video of camera</li> <li>• Multiple layer maps supported</li> </ul>	Recording Policy	<ul style="list-style-type: none"> <li>• Continuous recording</li> <li>• Manual recording</li> <li>• Event-driven recording along with rules</li> <li>• Scheduled recording on daily or weekday basis</li> <li>• Post alarm recording 5-45 minutes</li> <li>• Pre-alarm recording 5-45 minutes</li> </ul>
PTZ	<ul style="list-style-type: none"> <li>• Pan, tilt, zoom operations (dependent of camera)</li> <li>• Built-in, floating PTZ control panel</li> <li>• Preset position (dependent of camera)</li> <li>• Scheduled or continuous camera patrolling</li> <li>• Event-driven camera patrolling</li> <li>• Support on Screen PTZ with 8 directional virtual control pad</li> <li>• Support CH Products USB joystick</li> </ul>	Rule Manager	<ul style="list-style-type: none"> <li>• Conditional recording/alert/notification</li> <li>• Email, FTP, SMS, phone,popup window, PTZ,VI Panel,Relay output notifications</li> <li>• Sound, alarm, round-the-clock alerts</li> </ul>
I/O	<ul style="list-style-type: none"> <li>• Digital I/O management</li> <li>• Support Ethernet I/O device</li> </ul>	Remote Management	Full functional operation & management via VMS Client
Multiple Displays	<ul style="list-style-type: none"> <li>• Dual monitors (36+36 views)</li> <li>• Supports live view, playback, eMap functions</li> <li>• Direct display to secondary monitor(s)</li> </ul>	Remote Client	• Web Client • iPhone client • Android Client
Investigation	<ul style="list-style-type: none"> <li>• Search by date, time, camera</li> <li>• Search by pre-defined recent time</li> <li>• Search by VI event combinations</li> <li>• Search over multiple days</li> <li>• Search over multiple cameras</li> <li>• Frame by frame / Key frame modes playback</li> <li>• Video clip bookmarking and commenting</li> <li>• Different color display on recorded data date</li> <li>• Search via built-in VI analyzer</li> <li>• Customizable bookmark</li> <li>• Intuitive, video thumbnail search results</li> <li>• Cue-in, cue-out and repeat</li> <li>• Quick playback by video thumbnail</li> <li>• 1/8, 1/4, 1/2, 1x, 2x, 4x, 8x play, pause, stop</li> <li>• AVI-formatted video clip export</li> <li>• 4-channel synchronized playback</li> <li>• 5 different time interval scroll bar drag and drop playback</li> <li>• Support full screen playback mode</li> <li>• Support 3 installation modes and 5 different Fisheye Dewarp playback display modes</li> </ul>	3rd Party IPCAM	ACTi, Arecont Vision, Asoni, AVTECH, AXIS, Bosch, Brickcom, Dahua, D-Link, Dynacolor, E DIMAX, EverFocus, Hikvision, IQinvision, Lilin, Messoa, Mobotix, Panasonic, Samsung, Shany, SIMON, SONY, Sunell, Vivotek
Instant Playback	<ul style="list-style-type: none"> <li>• Supported in video alarm, event alarm, view functions</li> <li>• Pre-defined playback durations</li> <li>• Video clip bookmarking</li> </ul>	Storage Expansion	<ul style="list-style-type: none"> <li>• Supports Infortrend RAID storage</li> <li>• Built-in RAID storage management</li> </ul>
		General & Misc.	<ul style="list-style-type: none"> <li>• Image enhancement</li> <li>• Video privacy mask</li> <li>• Digital zoom in, zoom out</li> <li>• Log viewer, log export mechanism</li> <li>• System lockup</li> <li>• Client auto login</li> <li>• Automatic storage recycling</li> <li>• Client-server architecture</li> <li>• Customized authority account management</li> <li>• Customizable appearance of Surveon logo</li> <li>• Configurable video retention period</li> <li>• Digital watermark proofing</li> <li>• Support DDNS Function</li> <li>• Support NTP Server synchronized</li> <li>• Support Virtual keyboard</li> <li>• Provide System and VI setup Help assistance</li> <li>• Support Customized Event management and log mechanism</li> </ul>
		Language	<ul style="list-style-type: none"> <li>• 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</li> </ul>

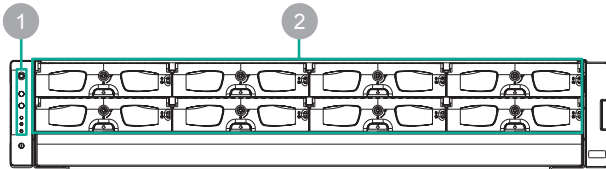
\* All specifications are subject to change without notice.  
 \* All brand names and registered trademarks are the property of their respective owners.

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40CH Megapixel H/W RAID NVR

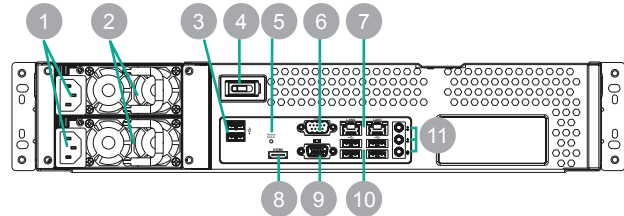
## Part Names and Functions

Front View SMR8000U Series



- 1 LED Indicators
- 2 Hard Drive Slots

Rear View



- 1 Power Socket
- 2 Power Supply
- 3 USB Port x2
- 4 Power Switch
- 5 Restore Button
- 6 COM Port
- 7 Ethernet Ports x2
- 8 HDMI Port
- 9 VGA Port
- 10 USB Port x4
- 11 Audio Port

## Hardware Specifications

System Processor	Intel® Core i3
System Memory	DDR3 4GB
Chipset	Intel® Q67 Express Chipset-Embedded
Operating System	2.5" HDD with Windows 7 Embedded System
Storage	3.5" SATA HDDs x8; HDD hot swappable with LED status indicator
I/O Interface	<ul style="list-style-type: none"> <li>• VGAx1; HDMIx1</li> <li>• RJ-45: 2x Gigabit Ethernet</li> <li>• USB: 6x USB2.0</li> <li>• COM: x1</li> </ul>
H/W RAID	RAID 0, 1, 5, JBOD
Electrical	<ul style="list-style-type: none"> <li>• Input voltage: 100V~240V, 3.5A</li> <li>• Power Supply: 430W</li> </ul>
Operating Environment	<ul style="list-style-type: none"> <li>• Humidity: 5% to 80% (non-condensing)</li> <li>• Temperature: 5° to 40°C</li> </ul>
LCD Panel	Yes
LED Indicator	Yes (Fan, Temperature, Power, HDD)
Dimensions	88.15(H) x 445(W) x 651.15(D) mm
Weight	8.9 Kg (w/o Hard Disk)
Certificate	BSMI, CB, FCC / CE Class B, UL60959/ IEC 60950, CCC for power only, GOST

## Ordering Information

Model Name	Description
SMR2006	6 CH, 2 Bay Megapixel RAID NVR
SMR2010	10 CH, 2 Bay Megapixel RAID NVR
SMR2016	16 CH, 2 Bay Megapixel RAID NVR
SMR4012U	12 CH, 4 Bay Megapixel RAID NVR
SMR4016U	16 CH, 4 Bay Megapixel RAID NVR
SMR4020U	20 CH, 4 Bay Megapixel RAID NVR
SMR5012	12 CH, 5 Bay Megapixel RAID NVR
SMR5016	16 CH, 5 Bay Megapixel RAID NVR
SMR5020	20 CH, 5 Bay Megapixel RAID NVR
SMR6025H	25 CH, 6 Bay Megapixel Hybrid RAID NVR
SMR6032H	32 CH, 6 Bay Megapixel Hybrid RAID NVR
SMR8016	16 CH, 8 Bay Megapixel HW RAID NVR
SMR8025	25 CH, 8 Bay Megapixel HW RAID NVR
SMR8032	32 CH, 8 Bay Megapixel HW RAID NVR
SMR8040	40 CH, 8 Bay Megapixel HW RAID NVR
SMR8016U	16 CH, 8 Bay Megapixel HW RAID NVR
SMR8025U	25 CH, 8 Bay Megapixel HW RAID NVR
SMR8032U	32 CH, 8 Bay Megapixel HW RAID NVR
SMR8040U	40 CH, 8 Bay Megapixel HW RAID NVR

## Optional Accessories

Part Number	Description
H72A0HA2321-0030	Hitachi, Enterprise, 1TB SATA HDD, 3Gb/s
H72A1HA2321-0030	Hitachi, Enterprise, 2TB SATA HDD, 3Gb/s
H72A1XA3XXX-0030	Hitachi, Enterprise, 2TB SATA HDD, 6Gb/s
H72A2XA2XXX-0030	Hitachi, Enterprise, 3TB SATA HDD, 6Gb/s
H72A1XA3XXDX-0030	Hitachi, Desktop, 2TB SATA HDD, 6Gb/s
H72A2XA3XXDX-0030	Hitachi, Desktop, 3TB SATA HDD, 6Gb/s

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## Performance Validation

Model	Camera Resolution	Camera FPS	Camera Bit Rate	Recording Channels	Local Live View Channels	Local Playback Channels	Remote Live View Channels	Remote Playback Channels
SMR2006	D1/VGA	30	2M	6	6	1	16	4
SMR2006	1.3M	30	4M	6	6	1	16	4
SMR2006	2M	15	4M	6	6	1	16	4
SMR2006	3M	10	4M	6	6	1	16	4
SMR2010	D1/VGA	30	2M	10	10	1	16	4
SMR2010	1.3M	30	4M	10	10	1	16	4
SMR2010	2M	15	4M	10	10	1	16	4
SMR2010	3M	10	4M	10	10	1	16	4
SMR2016	D1/VGA	30	2M	16	16	1	16	4
SMR2016	1.3M	30	4M	16	16	1	16	4
SMR2016	2M	15	4M	16	16	1	16	4
SMR2016	3M	10	4M	16	16	1	16	4
SMR4012U	D1/VGA	30	2M	12	12	1	16	4
SMR4012U	1.3M	30	4M	12	12	1	16	4
SMR4012U	2M	15	4M	12	12	1	16	4
SMR4012U	3M	10	4M	12	12	1	16	4
SMR4016U	D1/VGA	30	2M	16	16	1	16	4
SMR4016U	1.3M	30	4M	16	16	1	16	4
SMR4016U	2M	15	4M	16	16	1	16	4
SMR4016U	3M	10	4M	16	16	1	16	4
SMR4020U	D1/VGA	30	2M	20	16 (20CH by tour)	1	16 (20CH by tour)	4
SMR4020U	1.3M	30	4M	20	16 (20CH by tour)	1	16 (20CH by tour)	4
SMR4020U	2M	15	4M	20	16 (20CH by tour)	1	16 (20CH by tour)	4
SMR4020U	3M	10	4M	20	16 (20CH by tour)	1	16 (20CH by tour)	4
SMR4012U	D1/VGA	30	2M	12	N/A	N/A	32	4
SMR4012U	1.3M	30	4M	12	N/A	N/A	32	4
SMR4012U	2M	15	4M	12	N/A	N/A	32	4
SMR4012U	3M	10	4M	12	N/A	N/A	32	4
SMR4016U	D1/VGA	30	2M	16	N/A	N/A	32	4
SMR4016U	1.3M	30	4M	16	N/A	N/A	32	4
SMR4016U	2M	15	4M	16	N/A	N/A	32	4
SMR4016U	3M	10	4M	16	N/A	N/A	32	4
SMR4020U	D1/VGA	30	2M	20	N/A	N/A	32	4
SMR4020U	1.3M	30	4M	20	N/A	N/A	32	4
SMR4020U	2M	15	4M	20	N/A	N/A	32	4
SMR4020U	3M	10	4M	20	N/A	N/A	32	4
SMR5012	D1/VGA	30	2M	12	12	1	16	4
SMR5012	1.3M	30	4M	12	12	1	16	4
SMR5012	2M	15	4M	12	12	1	16	4
SMR5012	3M	10	4M	12	12	1	16	4
SMR5016	D1/VGA	30	2M	16	16	1	16	4
SMR5016	1.3M	30	4M	16	16	1	16	4
SMR5016	2M	15	4M	16	16	1	16	4
SMR5016	3M	10	4M	16	16	1	16	4
SMR5020	D1/VGA	30	2M	20	16 (20CH by tour)	1	16 (20CH by tour)	4
SMR5020	1.3M	30	4M	20	16 (20CH by tour)	1	16 (20CH by tour)	4
SMR5020	2M	15	4M	20	16 (20CH by tour)	1	16 (20CH by tour)	4
SMR5020	3M	10	4M	20	16 (20CH by tour)	1	16 (20CH by tour)	4
SMR6025H	D1/VGA	30	2M	9+16 (IP+Analogy)	25	1	25	4
SMR6025H	1.3M	30	4M	9+16 (IP+Analogy)	25	1	25	4
SMR6025H	2M	15	4M	9+16 (IP+Analogy)	25	1	25	4
SMR6025H	3M	10	4M	9+16 (IP+Analogy)	25	1	25	4
SMR6032H	D1/VGA	30	2M	16+16 (IP+Analogy)	25 (32CH by tour)	4	25 (32CH by tour)	4
SMR6032H	1.3M	15	2M	16+16 (IP+Analogy)	25 (32CH by tour)	4	25 (32CH by tour)	4
SMR8016	D1/VGA	30	2M	16	16	4	36	4
SMR8016	1.3M	30	4M	16	16	4	36	4
SMR8016	2M	25	6M	16	16	4	36	4
SMR8016	3M	10	6M	16	16	4	36	4
SMR8025	D1/VGA	30	2M	25	25	4	36	4
SMR8025	1.3M	30	4M	25	25	4	36	4
SMR8025	2M	25	6M	25	25	4	36	4
SMR8025	3M	15	6M	25	25	4	36	4

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## Performance Validation

Model	Camera Resolution	Camera FPS	Camera Bit Rate	Recording Channels	Local Live View Channels	Local Playback Channels	Remote Live View Channels	Remote Playback Channels
SMR8032	D1/VGA	30	2M	32	32	4	36	4
SMR8032	1.3M	30	4M	32	32	4	36	4
SMR8032	2M	25	6M	32	32	4	36	4
SMR8032	3M	15	6M	32	32	4	36	4
SMR8040	D1/VGA	30	2M	40	36 (40CH by tour)	4	36 (40CH by tour)	4
SMR8040	1.3M	30	4M	40	36 (40CH by tour)	4	36 (40CH by tour)	4
SMR8040	2M	25	6M	40	36 (40CH by tour)	4	36 (40CH by tour)	4
SMR8040	3M	15	6M	40	36 (40CH by tour)	4	36 (40CH by tour)	4
SMR8016U	D1/VGA	30	2M	16	16	4	36	4
SMR8016U	1.3M	30	4M	16	16	4	36	4
SMR8016U	2M	25	6M	16	16	4	36	4
SMR8016U	3M	15	6M	16	16	4	36	4
SMR8025U	D1/VGA	30	2M	25	25	4	36	4
SMR8025U	1.3M	30	4M	25	25	4	36	4
SMR8025U	2M	25	6M	25	25	4	36	4
SMR8025U	3M	15	6M	25	25	4	36	4
SMR8032U	D1/VGA	30	2M	32	32	4	36	4
SMR8032U	1.3M	30	4M	32	32	4	36	4
SMR8032U	2M	25	6M	32	32	4	36	4
SMR8032U	3M	15	6M	32	32	4	36	4
SMR8040U	D1/VGA	30	2M	40	36 (40CH by tour)	4	36 (40CH by tour)	4
SMR8040U	1.3M	30	4M	40	36 (40CH by tour)	4	36 (40CH by tour)	4
SMR8040U	2M	25	6M	40	36 (40CH by tour)	4	36 (40CH by tour)	4
SMR8040U	3M	15	6M	40	36 (40CH by tour)	4	36 (40CH by tour)	4
SMR8016U	D1/VGA	30	2M	16	N/A	N/A	72	4
SMR8016U	2M	30	4M	16	N/A	N/A	72	4
SMR8016U	2M	25	6M	16	N/A	N/A	72	4
SMR8016U	3M	15	6M	16	N/A	N/A	72	4
SMR8025U	D1/VGA	30	2M	25	N/A	N/A	72	4
SMR8025U	1.3M	30	4M	25	N/A	N/A	72	4
SMR8025U	2M	25	6M	25	N/A	N/A	72	4
SMR8025U	3M	15	6M	25	N/A	N/A	72	4
SMR8032U	D1/VGA	30	2M	32	N/A	N/A	72	4
SMR8032U	1.3M	30	4M	32	N/A	N/A	72	4
SMR8032U	2M	25	6M	32	N/A	N/A	72	4
SMR8032U	3M	15	6M	32	N/A	N/A	72	4
SMR8040U	D1/VGA	30	2M	40	N/A	N/A	72	4
SMR8040U	1.3M	30	4M	40	N/A	N/A	72	4
SMR8040U	2M	25	6M	40	N/A	N/A	72	4
SMR8040U	3M	15	6M	40	N/A	N/A	72	4
NVR2116	D1/VGA	30	2M	16	N/A	N/A	72	4
NVR2116	1.3M	30	4M	16	N/A	N/A	72	4
NVR2116	2M	25	6M	16	N/A	N/A	72	4
NVR2116	3M	15	6M	16	N/A	N/A	72	4
NVR2125	D1/VGA	30	2M	25	N/A	N/A	72	4
NVR2125	1.3M	30	4M	25	N/A	N/A	72	4
NVR2125	2M	25	6M	25	N/A	N/A	72	4
NVR2125	3M	15	6M	25	N/A	N/A	72	4
NVR2132	D1/VGA	30	2M	32	N/A	N/A	72	4
NVR2132	1.3M	30	4M	32	N/A	N/A	72	4
NVR2132	2M	25	6M	32	N/A	N/A	72	4
NVR2132	3M	15	6M	32	N/A	N/A	72	4
NVR2148	D1/VGA	30	2M	48	N/A	N/A	72	4
NVR2148	1.3M	30	4M	48	N/A	N/A	72	4
NVR2148	2M	25	6M	48	N/A	N/A	72	4
NVR2148	3M	15	6M	48	N/A	N/A	72	4
NVR2164	D1/VGA	30	2M	64	N/A	N/A	72	4
NVR2164	1.3M	30	4M	64	N/A	N/A	72	4
NVR2164	2M	25	6M	64	N/A	N/A	72	4
NVR2164	3M	15	6M	64	N/A	N/A	72	4

\* Burn-In Test condition: 14 days, round-the-clock  
 \* IP cameras using dual streaming capability

Network Video Recorder