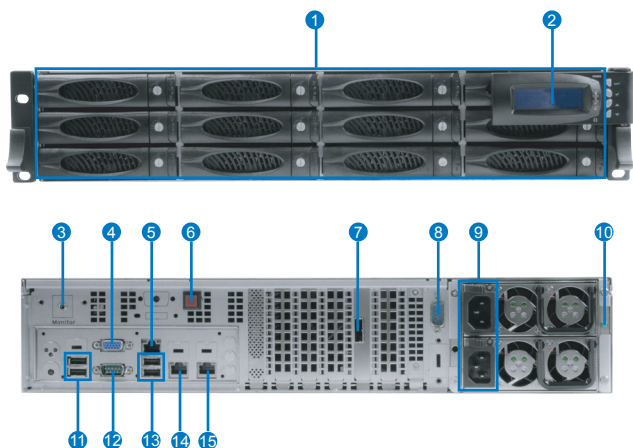# NVR-1665

200-Channel 12-Bay RAID Rackmount Standalone NVR with Redundant Power Supply

Full HD 1080

- 12-bay Rackmount (2U) with hardware RAID (0,1, 5, 6, 10, 50, 60)
- Manage up to 200 cameras or video encoders
- Recording up to 200 channels
- Live view local up to 16-channel, remote up to 64-channel
- Synchronized playback local up to 9-channel, remote up to 64-channel
- Export video with RAW and AVI formats
- Event trigger, response and notification
- Mobile Client, Web Client, Workstation
- Location-based management with e-Map
- 64-channel free license included
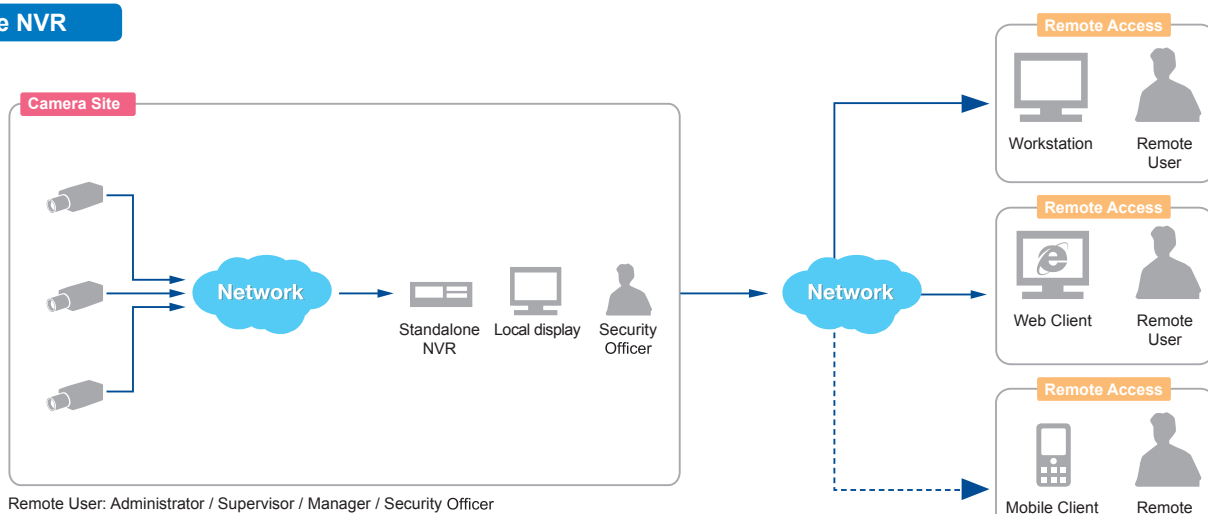- Levelone camera support via licensed Camera Device Pack
- Power redundancy

PHOTO INDICATION

1. Storage Disk Bays
2. Smart Panel
3. RS-232 Port
4. VGA Port
5. LAN 2
6. Power Switch
7. SAS Expansion Port
8. Serial Port 2
9. AC Power Input
10. Mute Button
11. USB Ports
12. Serial Port 1
13. USB Ports
14. LAN 1
15. LAN 0

SOLUTION ARCHITECTURE

Standalone NVR

Camera Site

Network — Standalone NVR — Local display — Security Officer — Network

Remote Access — Workstation / Remote User

Remote Access — Web Client / Remote User

Remote Access — Mobile Client / Remote User

Remote User: Administrator / Supervisor / Manager / Security Officer

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NVR-1665

▌ PRODUCT SPECIFICATION

NVR-1665	
• General	
Full Name	Standalone Network Video Recorder
Maximum Number of Clients	1 local, 3 remote
Maximum Number of Cameras	200
Free License	64 channels
Compression	H.264, MPEG-4, MJPEG
Maximun Local Display Resolution	1920 x1080
• Live View	
Display Layout Mode	Local: 1, 4, 5, 6, 8, 9, 10, 12, 16 Remote: 1, 4, 5, 6, 8, 9, 10, 12, 16, 18, 24, 25, 35, 36, 48, 49, 64
View Manager	An interface to define display layouts and the pre-set cameras within layout in the public or private view
View Patrol	Automatic switch between different views or devices
View Panel	Contains the list of pre-defined views for quick launch
Digital Zoom	Zoom in/out digitally by PiP (Picture-in-Picture)
Camera Tree	Drag and drop video source from camera tree into display layout; display camera status on the tree
Manual Recording / Snapshot	Instant recording upon mouse click / Instant snapshot upon mouse click or hot key
Event Panel	Display event status upon alarm or upon connection loss or recovery
Two-way Audio	Audio sound from and to all the audio supported devices; audio broadcast to multiple devices at the same time
Dual Stream Management	Live view of stream 1 or stream 2 of dual stream devices
Instant Playback	Instant playback in live view window
• e-Map	
Layout	Area maps with camera icons, small live view windows; hyperlinked
Map Switch and Tour	Manual switch and auto tour modes selectable
Setup	e-Map image upload; camera positioning; map linking
PTZ Mode	Mouse PTZ mode to control e-Map video streams
• PTZ	
Control	Pan, tilt and zoom controls; speed control; both buttons and mouse controls
Preset Points and Tours	Create preset points; create auto tours between preset points
Number of Preset Points	32
Joystick	USB based joystick supported
Default Protocol	Auto-detect camera's PTZ protocol. Available protocols: ACTi, Pelco-P, Pelco-D, Dynacolor, Visca
• Recording	
Recording Throughput	Maximum total bitrate 300 Mbps (Example: 200 Channels: 1MP, 15fps, H.264, 1.5Mbps; 150 Channels: 2MP, 15fps, H.264, 2Mbps; 100 Channels: 2MP, 30fps, H.264, 3Mbps; 75 Channels: 5MP, 15fps, H.264, 4Mbps)
Scheduled Recording	Record video with user defined schedule
Event Recording	Record video when the alarm event is triggered, including the pre-event buffered video clip
Speed Up	Different recording frame rate settings for non-event and triggered event
Manual Recording	Instant recording upon mouse click
Dual Stream Management	Recording of stream 1 or stream 2 of dual stream devices
Recording Frame Rate	Max 6000 fps total; Max 30 fps per camera
• Storage	
Interface	Serial ATA
Bundled System HDD	Kingston 60GB 2.5" SSD
HDD Bay	12
RAID Level	Hardware RAID 0,1, 5, 6, 10, 50, 60
External Storage Support	SAS, iSCSi, USB mass storage (USB 2.0)
• Search & Playback	
Recording Search	Search video recordings by time, event, channel and bookmark, and the results are listed as clickable thumbnails for full-size view and snapshot download
Playback Control	Continuous forward and backward playback with speeds 1x/2x/4x/8x or frame-by-frame; pause; stop
Synchronized Playback	Up to 9 channels for local display; up to 64 channels for remote client
Manual Snapshot	Instant snapshot from playback upon mouse click
Digital Zoom	Zoom in/out digitally by PiP (Picture-in-Picture)
Video Cropping	Crop a short video clip from long recording file and save it as an independent file
Video Export	Export video clips in AVI or RAW format; text overlay supported
• Event Management	
Event Trigger	Video motion detection; Passive IR sensor; External device through digital input; Video loss and recovery; Network loss and recovery; Server loss and recovery; Disk full; Disk not found
Event Response	Record video; Pop-up window with live video; Switch to hotspot window; Play beep sound; Activate external device through digital output; Upload snapshot to FTP server; Execute system command to activate other programs; E-mail notification with snapshots; Command a PTZ device to go to a preset point
Manual Event	Manually activate external devices through digital output via live view monitor
Scheduler	Define the schedule of event manager
• Video Analytics	
Smart Search	Smart search of recorded videos by Motion Detection and Tamper

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NVR-1665

• System

Permission Control	Unlimited number of users, Active Directory, Customizable permissions for user groups, Playback password protected, Password validity period
Operating System	Windows Embedded Standard 7
Language	Multi-language support
GPS Position	Manual setting

• Remote Access

PC Client Program	User interface program (Workstation) with live view, PTZ, playback, e-Map, event management, setup
PC Web Browser	Microsoft Internet Explorer 8.0, 9.0, 10.0 and 11.0 with live view, PTZ, playback, event management, setup
Mobile Client Program	Mobile device application (Active Mobile Client) supports live view, PTZ control, event or time based search and playback Supported devices: iPhone, iPad, iTouch and Android device
Remote Client PC System Requirement	1-16 channels: Intel Core 2 Quad 2.4GHz, 4GB RAM 17-64 channels: Intel Core i7-920 2.67 GHz, 4GB RAM
Client PC Operating System	Windows 8, Windows 7, Windows Server 2012, Windows Server 2008

• Hardware

CPU	Intel Processor
RAM	8GB
Dimensions (W x H x D)	482 mm x 88 mm x 620 mm (19" x 3.5" x 22.1")
Weight	16.4 kg
Operating Temperature	0°C~ 40°C (32°F ~ 104°F)
Operating Humidity	10% ~ 85% RH
Power Source / Consumption	100V~240V AC, 47~63Hz (Built-in Redundant Power Supply) / 85.5 W
Approvals	CE (EN 55022 Class B, EN 55024), FCC (Part15 Subpart B Class B), UL (for built-in power adapter)
USB	4, USB 2.0
Ethernet Port	3, Gigabit Ethernet ports (1000Base-T), RJ-45 connector
External SAS Port	1
Display Port	1 VGA
Bundled Accessories	Power cord x 2, RJ-45 Ethernet cable x 3, External RJ-11 to DB-9 serial cable x 1, External SATA cable x 2, Rail kit (Type B)

• Integration

Unified Solution	encoders, central management system, TV wall and intelligent video surveillance software
Open Platform Solution	Support ONVIF compliant devices