

DS-2200 UHD Series

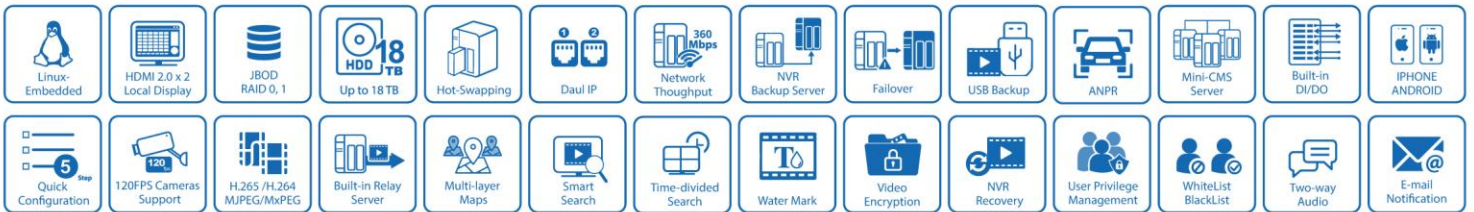
4K Hardware Decode, 4K Display and H.265 Linux-embedded NVR

- 4 CH DS-2204 UHD**
Local Display Monitoring
- 8 CH DS-2208 UHD**
Local Display Monitoring
- 12 CH DS-2212 UHD**
Local Display Monitoring
- 16 CH DS-2216 UHD**
Local Display Monitoring
- 20 CH DS-2220 UHD**
Local Display Monitoring
- 24 CH DS-2224 UHD**
Local Display Monitoring



Key Features

- ◆ Superb 4K UHD Hardware Decode
- ◆ Support 4K UHD/Full HD/XGA Display
- ◆ Multi-NVR & Multi-channel Simultaneous Playback
- ◆ Marvelous PC-less Solution: Dual/Mirror/Target/eMap Display
- ◆ Automatic Number Plate Recognition Solution (ANPR/LPR)



Compatible Network Camera Brands and Partners





Video Backup



Playback



Integration



Event Notification



Monitoring



Management



Smart Analysis



Recording

Multifunctional All-In-One DIGIEVER NVR

■ Superb 4K Hardware Decode & 4K Local Display

- Support up to 12 MP (4K UHD) IP Camera
- Dewarp Full HD Panomorph IP Cameras
- Liveview Display Modes:
1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 16, 20, 25, 30, 32, 36, 5+1, 12+1, Full Screen, Sequential Mode
- Marvelous PC-less Solution:
Dual Display, Mirror Display, Target Display, eMap Display
- Audio Out Option between 2 Screens
- Liveview Instant Playback
- Two-way Audio via USB Type Sound Adapter
- Speed adjustment for ONVIF PTZ camera
- Auto-mute Mode for Idle Cursor

■ Real-time Remote Monitoring

- Liveview Display Modes:
1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 16, 20, 25, 30, 32, 36, 42, 49, 56, 64, 5+1, 12+1, Full Screen, Sequential Mode
- Built-in Mini-CMS Server (up to 256-channel)
- Built-in NVR Relay Server
- Liveview Instant Playback
- Multi-window Operation
- Quick Navigation with Dynamic E-Map
- Region of Interest (ROI): Monitor 5 or 7 Regional Images from One High-resolution Camera
- Speed adjustment for ONVIF PTZ camera
- YouTube/Facebook Live: Live Streaming Broadcast

■ Megapixel Real-time Video Recording

- Up to 36TB Storage Capacity
- S.M.A.R.T HDD Health Monitoring
- Connect up to 4 iSCSI Servers for Storage Expansion
- Up to 12 Megapixel Recording Resolution
- Support 120 FPS Camera Recording
- Camera Group Recording:
Assign Video Keeping Days for Each Camera
- Event Smart Recording for Always Recording
- Schedule Snapshot:
Automatic Snapshot of All Selected Cameras

■ Multi-channel Playback

- Maximum 16-channel Playback Simultaneously
- Remote Multi-NVR Playback & Smart Search
- Event Instant Playback on Liveview and E-Map
- Bookmark: Mark Incident Moment for Quick Tracking
- Data Search: Explore Event & Meta-Data in a Smarter and More Efficient Way
- Time-divided Search: Quickly Find the Key Frame to Export Related Video and Snapshot
- Export Video with Watermark
- Export Video with OSD Displayed

■ Monitor Everywhere via iOS and Android Mobile Device

■ Smart Automatic Number Plate Recognition Solution (ANPR/LPR)

- Simple Setup from Liveview Window for 24/7 Real-Time Monitoring & Car Plate Number Detection.
- Instant Snapshots & Video Recording
- Intelligent Data Search for Snapshots & Video clips, Fuzzy Search supported
- Export list from search result
- High Compatibility with Diverse Cameras & Brands
- Dedicated ANPR channel via License purchase

■ Powerful Event and Action Management

- Detection of Device Connection Lost, External Events and Camera Motion/IVA
- Notification via Liveview Pop-out Window, Email, SMS, Buzzer and External Devices
- Configuration-Free Alarm Notification for HDD Error/Failed
- Chain Event to Have Accurate Event Notification
- Intuitive Event & Action Summary

■ Advanced and Reliable Security System

- Stable and Secure Linux-embedded System
- Two User-defined Storage Volume Modes:
Multi-RAID Storage Volume & Single HDD Storage Volume
- Hot Swappable HDD Design
- 5 Steps Quick Configuration
- White/Black List for IP Range
- Detailed Log Information
- 4 Smart Access Ways:
Anonymous Access, Reboot Auto Access, Timeout Auto Access, and Active Directory (AD) Access
- Flexible User Privilege Management
- NVR Failover and System Monitoring
- Auto Power Resume after Power Shortage
- Built-in SNMP Server to Central Monitor NVRs' Status
- Manage and Configure DIGIEVER PoE Switches on NVR

■ Diverse Backup Methods

- NVR Edge Backup
- Become NVR Backup Server: Schedule/Manual
- 4 External Devices for Video Backup (Schedule/Manual):
USB Device, DIGIARRAY, NAS and FTP server
- Instant Export while Playback on Remote
- Export Files from Remote and Local Playback
- Export Files with Free-Installation Video Player
- Event Backup to External FTP: Video Clip & Snapshot

■ Comprehensive Compatible Ability

- Support H.265/H.264/MJPEG/M-PEG4/MxPEG
- Support 120+ Brands and 7000+ IP Cameras
- Support ONVIF Profile S & T/Generic RTSP & MJPEG
- Support Uninterruptible Power Supply (UPS)
- Integrated POS Terminals for Transaction Surveillance
- Integrated Access Control Server
- Integrated Modbus Analog I/O-Digital I/O Box Server
- Integrated IP Video Door Intercom Server

Technical Specifications

System

CPU	Intel Quad-core CPU	Operating System	Linux-embedded
HDD Tray	2 (Hot-swappable)	Disk Management	Linear (JBOD), RAID 0/1
Maximum Capacity¹	Up to 36 TB (HDD 2.5"/3.5" SATA II/III or SSD x2)	Max. Storage Volume	Up to 2 volumes (Global Hot Spare)
LAN Port²	2.5 Gigabit Ethernet x 2	Operating Temperature	0~40°C (32°F~104°F)
USB Connector	USB 3.2 Gen 1 x 3 (front 1, rear 2)	Operating Humidity	5%~95% R.H.
Video Output Connector	HDMI 2.0a x 2	Power Supply	External power adaptor, 65W Input power voltage: 100V to 240V AC
Certification	FCC, CE, VCCI, BSMI, C-TICK	Power Consumption	13.8W~20W
Operation User Interfaces	(1) Local display monitoring/playback/setting (2) Remote Client with login shortcut (3) Mobile App: Android and iOS	H/W Dimensions	163.5 (H) x 108 (W) x 230 (D) mm 6.43 (H) x 4.25 (W) x 9.05 (D) inch
Supported Languages	Bulgarian, Croatian, Czech, Dansk, Deutsch, Dutch, English, Finnish, French, Indonesian, Italian, Japanese, Korean, Hebrew, Hungarian, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, Thai, Turkish, Tradition Chinese, Simplified Chinese, Vietnamese		

Liveview

H/W Decode Max Resolution per Channel	Resolution up to 8MP (4K UHD) (H.265 & H.264)		
Display Resolution	(1) HDMI 2.0 display port (HDMI①): 3840 x 2160 (4K UHD), 1920 x 1080 (Full HD), 1024 x 768 (XGA) (2) HDMI 2.0 display port (HDMI②): 1920 x 1080 (Full HD), 1024 x 768 (XGA)		
H.265 & H.264 H/W Decode Max. FPS in Single Page	(1) In 3840 x 2160 (4K) Display: 4K(8MP):120 FPS, Full HD: 360 FPS, HD: 480 FPS, D1: 480 FPS (2) In 1920 x 1080 (Full HD) Display: 4K (8MP):120 FPS, Full HD: 480 FPS, HD: 480 FPS, D1: 480 FPS		
Two-screen Display (HDMI 2.0 x 2)	(1) Mirror display: monitor the same cameras at two sites (2) Dual display: monitor more cameras on two monitors (3) Target display: focus on key areas during video playback (4) eMap display: monitor cameras with a detailed map information		
Max. FPS in Single Channel	Up to 120 FPS per CH		
Liveview Control	PTZ Panel, PTZ Patrol, Auto Focus, Digital zoom in/out, Audio, OSD settings, Snapshot, Auto/Manual stream change, Instant playback, ROI, Two-way audio ⁶ , Panomorph ⁷		
E-Map³	Multi-layer maps, Double-click to pop-out video window, Pop-out event window, Event instant playback		
Mini-CMS Server Monitoring³	Up to 256 channels from multiple NVR sites		
Automatic Number Plate Recognition (ANPR/LPR)	Video format: H.264 Max 2 CH, Full HD, 30 FPS	Applied models: DS-2204 UHD/DS-4204 UHD, DS-4208 UHD, DS-4212 UHD	
Liveview Optimization	User-defined dual stream auto switch		

Recording

Max. Network Throughput⁴	360 Mbps	File format	AVI
Video Format	H.265, H.264, MPEG4, MJPEG, MxPEG, Axis Zipstream	HDD Capacity Automatic Recycle	(1) Max. days of each camera (2) Total capacity percentage
Recording Modes	No recording, Event recording, Schedule recording, Always recording, Audio recording by event, Pre-event and Post-event recording, Manual recording		

Playback

Multi-channel Playback⁵	Max. 16-channel Simultaneously	Multi-NVR Playback	Remotely playback recording videos up to 16-channel from multiple DIGIEVER NVRs
Recording Types	Normal, Event, Video clip, Recovery, Time overlap, Failover (remote), USB device (local)	Search Modes	Date, time, channel and recording type
Smart Search³	Motion detection, Foreign object detection, Missing object detection, Camera tampering detection, Lose focus	Playback Control	Rewind, Slow motion, Fast forward, Frame by Frame Playback, Panomorph ⁷ , Snapshot, ROI, Customized watermark, Bookmark, Data search
Backup Methods	Export Files on remote and local playback, USB backup (FAT32 & NTFS), Become NVR backup server, Local backup to USB device, Remote backup to NAS and FTP server, NVR edge backup, Instant export while playback videos on remote, Event backup to external FTP		
Video Player	Installation-free NVRPlayer with multi-channel playback		

Event & Action Management

Event Types	<p>(1) <u>Camera Events:</u> Connection lost, Connection lost delay, Motion detection, Audio detection, Cross-line detection, Temperature detection, People counting threshold alarm, Loitering detection, Tampering detection, Intrusion detection, Advanced motion detection, Foreign/Missing object detection, Low FPS, Digital input (with DIGI-GPIO)</p> <p>(2) <u>NVR Events:</u> NVR connection lost, UPS low power warning, Storage Threshold warning, Abnormal shutdown, Time sync failed, External event (HTTP-in)</p> <p>(3) <u>Storage Event:</u> RAID Degraded/ Rebuilding/ Failed</p> <p>(4) <u>NVR Hardware Events:</u> CPU temperature warning, CPU fan warning, System fan warning, HDD error warning, HDD fail warning</p>
Action Types	Alert sound, Event log history, Video pop-out window, Highlight video window, Event recording, E-Mail notification, Video clip/ snapshot via E-Mail, SMS, Buzzer alarm, Go to pre-set point, Camera digital output, SNMP trap, External IO box, Stack light, Network horn speaker, Backup to external FTP and User-defined action (HTTP-out)
Chain Event	Precise alarms when multi-events triggered within user-defined time

Security Management

User Privilege	Administrator, Power user and User	Advanced User Management	Random password sent by Email, Account expiration by assigning a specific date
System Log Information	Hardware log, System log, Event log, File access log, Current user log, Historical user log	NVR Failover	Monitor up to 4 NVRs in default (Option up to 16 NVRs)
Access Control Device Management	Manage up to 4 access control devices in default (Option up to 16 devices)	External Modbus Analog I/O-Digital I/O Box	Connect up to 4 Modbus A/IO-D/IO boxes in default (Option up to 16 boxes)
IP Range Access Control	White/Black List to permit or prohibit specific IP address	Timeout Setting	60~3600 seconds
Advanced Security	Video watermark and password on exported video file		

Network Service

Protocol	HTTP, TCP/IP, DHCP, DNS, DDNS, UPnP, FTP, NTP, SMTP, IPv6 (for NVR)	File Sharing	Windows networking, FTP service
Two LAN Port Applications	Share IP, Separated IP and Load balance	Built-in Servers	Built-in DHCP/NTP server

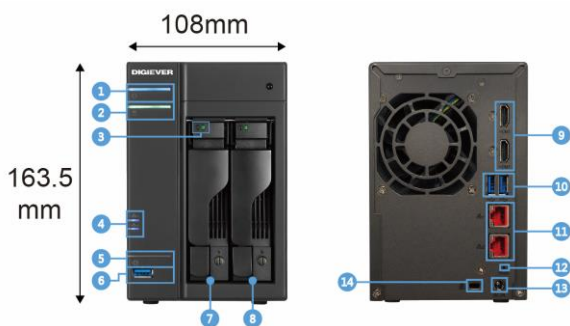
Remote Web Browser PC Requirements

OS (32 and 64-bit)	Windows 7/8/10/11		
CPU	< 16 CH: Intel Dual Core CPU 3.0GHz or above	≥ 16 CH: Intel i5/i7 CPU 3.3GHz or above	
Memory	< 16 CH: DDR3 4G or above	≥ 16 CH: DDR3 8G or above	

- Note 1 The standard system is shipped without HDD.
 Note 2 User is advised to connect cameras and DIGIEVER NVR with gigabit switch
 Note 3 E-Map, Built-in Mini-CMS Server Monitoring and Smart Search are not supported on local display.
 Note 4 Maximum network throughput is varied in different environment.
 Note 5 Multi-channel playback on remote web browsers is supported up to 16 channels and multi-channel playback on local display is supported up to 4 channels.
 Note 6 Camera is needed to support two-way audio/ corridor mode and integrated with DIGIEVER NVR. On local site, it is necessary to prepare a USB type external audio sound adapter for connecting speaker/microphone to NVR.
 Note 7 DIGIEVER NVR supports dewarping display image of ACTi, AXIS, VIVOTEK, ImmerVision Panomorph and fisheye cameras.
 Note 8 DIGIEVER NVR supports H.264, MPEG4, MJPEG, MxPEG format for local display.

*All designs and specifications are subject to change without prior notice.

Hardware Appearance



1. Power LED Indicator
2. System LED Indicator
3. HDD LED Indicator
4. Network LED Indicator
5. USB backup button with LED indicator
6. USB 3.2 (for auto video backup)
7. HDD1
8. HDD2
9. HDMI 2.0a x 2
10. USB 3.2 Gen 1 x 2
11. 2.5 Gigabit RJ45 Port x 2
12. Reset Button
13. DC Input
14. K-lock