DIGIEVER

DS-16300-RM Pro+ Series

Linux-embedded Standalone NVR

4K UHD H/W DECODE | **64CH** REAL-TIME | **H.265** SUPPORT | **NETWORK THROUGHPUT 450Mbps** | Linux | intel inside

16 CH DS-16316-RM Pro+		**20 CH** DS-16320-RM Pro+		**25 CH** DS-16325-RM Pro+	
Video Recording		**Video Recording**		**Video Recording**	
CH No.	Up to 16ch	CH No.	Up to 20ch	CH No.	Up to 25ch

32 CH DS-16332-RM Pro+		**36 CH** DS-16336-RM Pro+		**42 CH** DS-16342-RM Pro+	
Video Recording		**Video Recording**		**Video Recording**	
CH No.	Up to 32ch	CH No.	Up to 36ch	CH No.	Up to 42ch

49 CH DS-16349-RM Pro+		**56 CH** DS-16356-RM Pro+		**64 CH** DS-16364-RM Pro+	
Video Recording		**Video Recording**		**Video Recording**	
CH No.	Up to 49ch	CH No.	Up to 56ch	CH No.	Up to 64ch

Key Features

- **Real-time Liveview Local Display**
  - Liveview Display Modes: 1, 2, 3, 5, 6, 8, 9, 10, 12, 16, 20, 25, 30, 32, 36, 42, 49, 56, 64, 5+1, 12+1, Full Screen, Sequential Mode
  - Marvelous PC-less Solution:
    Dual Display, Mirror Display, Target Display, eMap Display
  - Dewarp Panomorph IP Cameras
  - Liveview Instant Playback
- **Real-time Remote Monitoring**
  - Built-in Mini-CMS server (up to 256CH)
  - Quick Navigation with Dynamic E-Map
  - Liveview Instant Playback
  - Region of Interest (ROI)
  - YouTube/Facebook Live: Live Streaming Broadcast
- **Up to 384TB Storage Capacity (Up to 16TB per HDD**
  (NVR: 256TB+ DIGIARRAY Storage Expansion Units: 128TB)
  - Connect up to 5 iSCSI Servers for Storage Expansion
  - Two User-defined Storage Volume Modes:
    Multi-RAID Storage Volume & Single HDD Storage Volume
- **Excellent Megapixel Real-time Video Recording**
  - Up to 12 Megapixel Recording Resolution
  - Camera Group Recording:
    Assign Video Keeping Days for Each Camera
  - Support 120FPS Camera Recording
  - Event Smart Recording
  - Schedule Snapshot:
    Automatic Snapshot of All Selected Cameras
- **Multi-channel Playback**
  - Maximum 16-channel Playback Simultaneously
  - Remote Multi-NVR Playback, Smart Search & Bookmark
  - 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

- **Monitor Everywhere via iOS and Android Mobile Device**
- **S.M.A.R.T HDD Health Monitoring**
- **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
  - Event & Action Summary
- **Advanced and Reliable Security System**
  - NVR Failover and System Monitoring
  - Built-in NVR Relay Server
  - Built-in SNMP Server to Central Monitor NVRs' Status
  - 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
  - Manage and Configure DIGIEVER PoE Switches on NVR
  - Detail Log Information
  - Flexible User Privilege Management
  - 4 Smart Access Ways:
    Anonymous Access, Reboot Auto Access, Timeout Auto Access, and Active Directory (AD) Access
- **Diverse Backup Methods**
  - Become NVR Backup Server: Schedule/ Manual
  - NVR Edge Backup
  - One Touch USB Backup (Support FAT32 & NTFS format)
  - 3 External Devices for Video Backup:
    DIGIARRAY, USB Device, NAS (Schedule/ Manual)
  - Export Files from Remote and Local Playback
  - Instant Export while Playback on Remote
  - Export File with Free-Installation Video Player
  - Event Backup to External FTP: Video Clip & Snapshot

Linux Embedded | HDMI/VGA Local Display | Mini-CMS Server | 16TB | Multi-volume RAID 1,6 RAID5 & RAID10 | Hot Swap | H.265 H.264 MJPEG MxPEG | JBOD RAID 0,1,5,6,10 | Network Throughput 450Mbps | USB Backup | NVR Backup Server | Video Encryption | Water Mark | iPhone/Android | 120FPS Cameras Support

Quick Configuration 5 Steps | Dual IP 1 2 | NVR Recovery | Built-in Relay Server | E-Map | Smart Search | User Privilege Management | White List Black List | Failover | E-Mail Notification | Build-in DI/DO | External I/O Box | Buzzer Alarm | External Event HTTP in | User-Defined Action HTTP out

Technical Specifications

System

CPU	Intel High Speed CPU
Operating System	Linux-embedded
HDD Tray	16 (Swappable)
Maximum Capacity[1]	Up to 256TB (2.5"/3.5" SATA HDD x 16)
LAN Port[2]	Gigabit x 2
USB Connector	USB2.0 × 1(Front), USB2.0 × 4（Rear）
GPIO	4-in, 2-out
Video Output Connector	HDMI x1, VGA x1 (For two-screen display)
Disk Management	Linear(JBOD), RAID 0/1/5/6/10
Operating Temperature	0～40℃
Operating Humidity	0~95% R.H.
Power Supply	Input: 100-240V AC, 50/ 60Hz, Output: 600W
Max. Storage Volume	Up to 16 volume (Global Hot Spare)
Power consumption	178 W (with 16 x 500GB HDD installed and in RAID 5 building process)
Certification	CE, FCC, BSMI, VCCI
H/W Dimensions	133.4(H) x 430(W) x 551.5(D) mm 5.25(H) x 16.92(W) x 21.71(D) inch
User Interfaces	(1) Local display monitoring/playback/setting (2) Remote Client with login shortcut (3) Mobile App: Android and iOS
Supported Languages	Bulgarian, Croatian, Czech, Dansk, Deutsch, Dutch, English, Finnish, French, Indonesia, 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) per channel (H.264)
H/W Decode Local Display Max. FPS in Single Page	4MP 360FPS/ Full HD 900FPS/ HD 1200FPS/ D1 1600FPS (H.264)
Two-screen Display	Mirror display to monitor the same cameras at two sites, Dual display to monitor more cameras on two monitors, Target display to focus on key areas during video playback, eMap display to monitor cameras with a detailed map information
Liveview Control	PTZ panel, PTZ Patrol, Auto Focus, Digital zoom in/out, Audio, Snapshot, Auto/Manual stream change, Event instant playback, Two-way audio[6], Panomorph[7]
E-Map[3]	Multi-layer maps, Double-click to pop-out video window, Pop-out event window, Event instant playback
Mini-CMS Server Monitoring[3]	Up to 256 channels from multiple NVR sites
Liveview Optimization	User-defined dual stream auto switch

Recording

Max. Network Throughput[4]	450Mbps
Video Format[8]	H.265, H.264, MPEG4, MJPEG, MxPEG, Axis Zipstream(H.264)
File format	AVI
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

Appearance

1. LED indicators: LAN1, LAN2, eSATA, HDD1 ~ HDD16
2. Power button
3. USB BACKUP button (For auto video backup)
4. USB 2.0 x 1 (Support auto video backup)
5. HDD1
6. HDD2
7. HDD3
8. HDD4
9. HDD5
10. HDD6
11. HDD7
12. HDD8
13. HDD9
14. HDD10
15. HDD11
16. HDD12
17. HDD13
18. HDD14
19. HDD15
20. HDD16
21. Gigabit LAN x 2
22. USB 2.0 x 4
23. eSATA x 2
24. VGA output
25. HDMI output
26. DI/DO (4 in 2 out)
27. Reset button
28. Power connector
29. Power switch

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

Playback

Multi-channel Playback[5]	Maximum 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 Search	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, One touch USB backup (FAT32 & NTFS), Become NVR backup server, Local backup to DIGIARRAY and USB device, Remote backup to NAS, 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	(1) Camera Events: 　Connection lost, Connection lost delay, Motion detection, Audio detection, Cross-line detection, Temperature detection, People counting threshold alarm, Digital input, etc. (2) NVR Events: 　NVR connection lost, UPS low power warning, Storage Threshold warning, Abnormal shutdown, External event (HTTP in), built-in digital input (3) Storage Event: 　RAID Degraded/ Rebuilding / Failed (4) NVR Hardware Events: 　CPU temperature warning, CPU fan warning, System fan warning, HDD error warning, HDD fail warning, Redundant power supply failure(Optional)
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, User-defined action (HTTP out), Backup to External FTP, Built-in digital output
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	Set up auto timeout period
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)
Two LAN Port Applications	Share IP, Separated IP and Load balance
File Sharing	Windows networking, FTP service
Built-in Servers	Built-in DHCP/NTP server

Remote Web Browser PC Requirements

OS (32 and 64-bit)	Windows 7 / 8 / 10
CPU	≧16CH: Intel i5/i7 CPU 3.3GHz or above
Memory	≧16CH: DDR3 8G or above

Note1. The standard system is shipped without HDD.
Note2. User is advised to connect cameras and DIGIEVER NVR with gigabit switch.
Note3. E-Map and Built-in Mini-CMS Server Monitoring is not supported on local display.
Note4. Maximum network throughput is varied in different environment.
Note5. Multi-channel playback on remote web browsers is supported up to 16 channels and multi-channel playback on local display is supported up to 5 channels.
Note6. Camera is needed to support two-way audio 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.
Note7. DIGIEVER NVR supports dewarping display image of ACTi, AXIS, VIVOTEK, ImmerVision Panomorph and fisheye cameras.
Note8. DIGIEVER NVR supports H.264, MPEG4, MJPEG, MxPEG format for local display.