

CNR-DS4200 Pro Series

Linux-embedded Standalone NVR



5 CH CNR-DS4205 Pro

Video Recording	
CH No.	Up to 5ch
Local Display Monitoring	
Modes	1, 4, 5+1, full screen, sequential

9 CH CNR-DS4209 Pro

Video Recording	
CH No.	Up to 9ch
Local Display Monitoring	
Modes	1, 4, 8,9, 5+1, full screen, sequential

12 CH CNR-DS4212 Pro

Video Recording	
CH No.	Up to 12ch
Local Display Monitoring	
Modes	1, 4, 8, 9,10,12, 5+1/12+1, full screen, sequential

16 CH CNR-DS4216 Pro

Video Recording	
CH No.	Up to 16ch
Local Display Monitoring	
Modes	1, 4, 8, 9,10,12,16, 5+1/12+1, full screen, sequential

20 CH CNR-DS4220 Pro

Video Recording	
CH No.	Up to 20ch
Local Display Monitoring	
Modes	1, 4, 8, 9,10,12,16, 20, 5+1/12+1, full screen, sequential

25 CH CNR-DS4225 Pro

Video Recording	
CH No.	Up to 25ch
Local Display Monitoring	
Modes	1, 4, 8, 9, 10, 12,16, 20, 25, 5+1/12+1, full screen, sequential

32 CH CNR-DS4232 Pro

Video Recording	
CH No.	Up to 32ch
Local Display Monitoring	
Modes	1, 4, 8, 9, 10, 12,16, 20, 25, 5+1/12+1, full screen, sequential

36 CH CNR-DS4236 Pro

Video Recording	
CH No.	Up to 36ch
Local Display Monitoring	
Modes	1, 4, 8, 9, 10, 12,16, 20, 25, 5+1/12+1, full screen, sequential

Main Features

- Real-time Liveview Local Display
 - Dual Display via HDMI/VGA
- Real-time Remote Browser Monitoring
 - Up to 36CH of single server
 - Liveview Display Modes: 1,4,8,9,10,12,16,20,25,30,36, 46, 49, 5+1/12+1, full screen and sequential mode
 - Built-in Mini-CMS server (up to 144CH)
 - Various Web Browsers in Windows OS
 - Quick Navigation with Dynamic E-Map
 - Multi-window Operation
- Excellent Megapixel Real-time Video Recording
 - 2 Megapixel Recording Resolution
 - Support 60FPS Camera Recording and Monitoring on Local Display and Remote Browser
- Multi-channel Playback on Remote Browser
 - Maximum 16-channel playback simultaneously
 - Event Instant Playback on Liveview and E-Map
 - Smart Search
- Monitoring everywhere via iOS and Android mobile device
- Multi-volume Storage Management with DIGIARRAY
 - Up to 72TB Storage Capacity (Up to 6TB per HDD) (NVR:24TB + DIGIARRAY Storage Expansion Units: 48TB)
- Diverse Backup Methods
 - Export Files from Remote and Local Playback
 - Instant Export while Playback on Remote
 - One Touch USB Backup
 - Remote Backup to NAS
 - Cloud Backup to Dropbox
 - Export File with Free-Installation Video Player
- 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
- Advanced and Reliable Security System
 - Reliable Linux Security System
 - NVR Failover and System Monitoring
 - Detailed Complete log Information
 - Flexible User Privilege Management



Compatible Network Camera Brands and Partners



Technical Alliance



Technical Specifications

System	
Operating System	Linux-embedded
CPU	Intel Dual Core CPU
HDD Tray	4 (Swappable)
Maximum Capacity	Up to 24TB (2.5"/3.5" SATA HDD x 4)
LAN Port ²	Gigabit x 2
USB Connector	USB2.0 × 5 (Front x 1, Rear x 4)
GPIO	4-in, 2-out
Video Output Connector	HDMI x1, VGA x1 (For Dual Display)
Disk Management	Single, JBOD, RAID0, RAID1, RAID5, RAID10
Operating Temperature	0~40°C
Operating Humidity	0~95% R.H.
Security Design	K-Lock security slot for theft prevention
Power Supply	Input: 100-240V AC, 50/ 60Hz, Output: 250W
Power consumption	54~65 W (with 4 x 500GB HDD installed and in RAID 5 building process)
H/W Dimensions	184.94(H) x 205.3(W) x 245.8(D) mm 7.28(H) x 8.08(W) x 9.68(D) inch
User Interfaces	(1) Remote Web Browsers: Microsoft® Internet Explorer/ Chrome /Firefox /Opera / Safari in Windows (32-bit) (2) Local display monitoring (3) Mobile App: Android and iOS
Supported Languages	Croatian, Czech, Dansk, Deutsch, Dutch, English, Finnish, French, Indonesia, Italian, Japanese, Korean, Hungarian, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, Thai, Turkish, Tradition Chinese, Simplified Chinese, Vietnamese

Liveview	
Liveview Control	PTZ panel, PTZ Patrol, Auto Focus, Digital zoom in/out, Audio, Snapshot, Auto/Manual stream change, Event instant playback, Two way audio ⁷ , Panomorph ⁸
E-Map ³	Multi-layer Maps, Pop-out Event Window, Event instant playback
Mini-CMS Server Monitoring ³	Up to 144 channels from multiple NVR sites
Liveview Optimization	Smart dual stream auto switch
H/W Decode Local Display Max. FPS in Single Page ⁴	Full HD 200FPS/ HD 300FPS/ D1 750FPS (H.264)

Recording	
Recording Modes	No recording, Event recording, Schedule recording, Always recording, Audio recording by event, Pre-event and Post-event recording
HDD Capacity Automatic Recycle	(1) Max. days (2) Total capacity percentage
File format	AVI
Video Format	H.264 · MPEG4 · MJPEG
Max. Network Throughput ⁵	360Mbps

Appearance	
 <p>246mm 185mm 205mm</p>	<ol style="list-style-type: none"> LED indicators: LAN, eSATA, HDD1, HDD2, HDD3, HDD4 Power button USB BACKUP button (For auto video backup) USB 2.0 x 1 (Support auto video backup) USB 2.0 x 1 HDD1 HDD2 HDD3 HDD4
	<ol style="list-style-type: none"> Gigabit LAN x 2 USB 2.0 x 4 eSATA x 2 (reserved) VGA output HDMI output DI/DO (4 in 2 out) Reset button Power connector K-lock security slot

Playback	
Multi-channel Playback ⁶	Maximum 16-channel simultaneously
Recording Types	Normal, Event, Video clip, Recovery and Time overlap
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 ⁸ , Snapshot
Backup Methods	Export Files from remote and local playback, One touch USB backup, Remote backup to NAS, Cloud backup, Instant export while playback videos on remote
Video Player	Installation-free NVRPlayer with multi-channel playback

Event & Action Management	
Event Types	Camera connection lost, NVR connection lost, Motion detection, Camera digital input, NVR recording error, built-in digital input and External event (HTTP in), Recording error
Action Types	Alert sound, Event log notification, Video pop-out window, Highlight video window, Event recording, E-mail notification, Video clip/ snapshot via E-mail, User defined action (HTTP out), Buzzer alarm, SMS, Go to PTZ preset point, Built-in digital output, External I/O box, Camera digital output

Security Management	
User Privilege	Administrator, Power user and User
System Log Information	Hardware log, System log, Event log, File access log, Current user log and Historical user log
NVR Failover	Monitor up to 4 NVRs in default (Option up to 16 NVRs)
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 · HTTPS · TCP/IP · DHCP · DNS · DDNS · UPnP · FTP · NTP · SMTP
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 Vista / 7 / 8
CPU	< 16CH: Intel Dual Core CPU 3.0GHz or above ≥ 16CH: Intel i5/i7 CPU 3.3GHz or above
Memory	< 16CH: DDR3 4G or above ≥ 16CH: DDR3 8G or above

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

- Note1. The standard system is shipped without HDD.
 Note2. User is advised to connect cameras and NVR with gigabit switch.
 Note3. E-Map and Built-in Mini-CMS Server Monitoring is not supported on local display.
 Note4. The max. resolution on liveview and playback of local display supports up to Full HD. Remote web browser's max. resolution is the same as recording.
 Note5. Maximum network throughput is varied in different environment.
 Note6. 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.
 Note7. Camera is needed to support two-way audio and integrated with NVR. On local site, it is necessary to prepare a USB type external audio sound adapter for connecting speaker/microphone to NVR.
 Note8. NVR supports dewarping display image of ACTI, AXIS, VIVOTEK, Immersion Panomorph and fisheye cameras.



3706 Alliance Drive, Greensboro, NC 27407
 1-888-50-CREST
 CrestElectronics.com