

CNR-DS2100 Pro+ Series

Linux-embedded Standalone NVR



5 CH CNR-DS2105Pro+ Video Recording CH No. Up to 5ch	9 CH CNR-DS2109Pro+ Video Recording CH No. Up to 9ch	12 CH CNR-DS2112Pro+ Video Recording CH No. Up to 12ch	16 CH CNR-DS2116Pro+ Video Recording CH No. Up to 16ch
20 CH CNR-DS2120Pro+ Video Recording CH No. Up to 20ch	25 CH CNR-DS2125Pro+ Video Recording CH No. Up to 25ch	32 CH CNR-DS2132Pro+ Video Recording CH No. Up to 32ch	36 CH CNR-DS2136Pro+ Video Recording CH No. Up to 36ch
42 CH CNR-DS2142Pro+ Video Recording CH No. Up to 42ch	49 CH CNR-DS2149Pro+ Video Recording CH No. Up to 49ch	56 CH CNR-DS2156Pro+ Video Recording CH No. Up to 56ch	64 CH CNR-DS2164Pro+ Video Recording CH No. Up to 64ch

Main Features

- Impressive Hardware Decode 4K Ultra HD Performance
- Real-time Liveview Local Display
 - Dual Display via HDMI/DVI-I
 - Liveview Display Modes: 1,4,9,10,12,16,20,25,30,36,42,49,56,64, 5+1, Full Screen and Sequential Mode
- Real-time Remote Browser Monitoring
 - Up to 64CH of single server
 - Liveview Display Modes: 1,4,8,9,10,12,16,20,25,30,36,42,49,56,64, 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
 - 8 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
- Multi-volume Storage Management with DIGIARRAY
 - Up to 36TB Storage Capacity (Up to 6TB per HDD) (NVR:12TB + DIGIARRAY Storage Expansion Units: 24TB)
- 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
- 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
- Monitoring everywhere via iOS and Android Mobile Device



Compatible Network Camera Brands and Partners



Technical Alliance



Technical Specifications

System	
Operating System	Linux-embedded
CPU	Intel Dual Core High Performance CPU
HDD Tray	2 (Internal)
Maximum Capacity	Up to 12TB (2.5"/3.5" SATA HDD x 2)
LAN Port ²	Gigabit x 1
USB Connector	USB3.0 x 2 (Rear), USB2.0 x 4 (Front x 2, Rear x 2)
Video Output Connector	HDMI x1, DVI-I x1 (For Dual Display)
Disk Management	Linear(JBOD), RAID0, RAID1
Operating Temperature	0~40°C
Operating Humidity	0~95% R.H.
Power Supply	External power adaptor, 120W Input :19VDC, 6.31A
Power consumption	42~55 W (with 2 x 1TB HDD installed and in RAID1 building process)
H/W Dimensions	63.2(H) x 295(W) x 271(D) mm 2.49(H) x 11.61(W) x 10.67(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

Playback	
Multi-channel Playback ⁵	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 ⁷ , 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

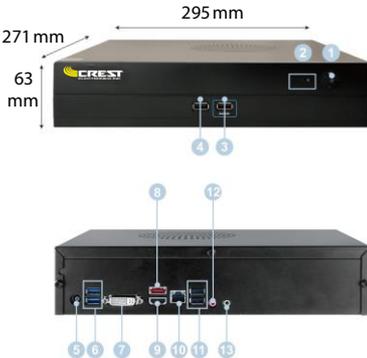
Event & Action Management	
Event Types	Camera connection lost, NVR connection lost, Motion detection, Camera digital input, NVR recording error, and External event (HTTP in), Recording error
Action Types	Alert sound, Event log notification, Video pop-out window, Highlight video window, Event recording,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

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 ⁶ , Panomorph ⁷
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 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 200FPS/ Full HD 480FPS/ HD 720FPS/ D1 1000FPS (H.264)

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

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 ⁴	400Mbps

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

Appearance	
 <p>271 mm 63 mm 295 mm</p>	<ol style="list-style-type: none"> Power button LED indicators: HDD USB 2.0 x 1 (Support auto video backup) USB 2.0 x 1 Power connector USB 3.0 x 2 DVI-I eSATA x 1 (reserved) HDMI x 1 Gigabit LAN x 1 USB 2.0 x 2 Audio mic input (reserved) Audio output (reserved)

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. 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 4 channels.
 Note6. 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.
 Note7. 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