



ND9441 ND9541

H.265 16-CH/32-CH
Embedded NVR

core+ 3.0



H.265/H.264 • 1080p Real-time • 4K Display • Dual LAN • 4x HDD •
RAID • Fisheye Dewarp • Cybersecurity • Web Plugin Free

VIVOTEK's ND9441 and ND9541 are the brand new H.265 Linux-based embedded standalone NVRs. Equipped for up to 16-CH/32-CH network cameras, the NVRs feature well-built ONVIF compliant and scalable configuration with VAST CMS empowering users to set up and manage advanced IP surveillance systems with ease. Both NVRs also support remote and mobile access, via VIVOCLOUD and iViewer app, for both iOS and Android handheld devices, providing users an open, flexible and intelligent NVRs for seamless use in small to medium sized video surveillance applications.

With H.265 compression technology and embedded with 4 HDD design providing up to 32TB, the ND9441 and the ND9541 offer greater than 30% ~ 50% more recording capacity than systems employing H.264 compression. This advance gives users larger storage space for longer durations of video recording. In order to provide uninterrupted service even when the network is temporarily disrupted, both NVRs are also equipped with dual Ethernet ports, as well as providing the flexibility to connect with network cameras in network failover situations. Further, the RAID 0/1/5 configuration provides further data security in the rare event of a hard drive failure.

Further enabling the recording of high-quality and detailed images, the ND9441 and the ND9541 support a maximum network camera resolution of 12-Megapixels. To intelligently manage bandwidth while maintaining this high-quality, the "Auto Adaptive Stream" function will adjust the display resolution automatically for each different layout type. Moreover, both NVRs support VIVOTEK's fisheye network camera "Fisheye Dewarp" function, which provides multiple de-warping modes in live view and playback, ensuring the correct angle of video view and detailed information for flexible usage. Further, to quickly and intuitively find any target event, the ND9441 and the ND9541 are equipped with "Story-Board Search" function, which provides a glimpse of past recordings over an intuitive timeline.

Finally, the ND9441 and the ND9541 support HDMI and VGA local video output, so users can control the GUI OSD interface via mouse & keyboard, eliminating the need for a separate PC to search video or playback from the NVRs. Moreover, the intuitive and friendly VIVOTEK GUI design gives users an even smoother experience of control than ever before.

Key Features

- H.265/H.264 Compression Technology
- 4K Display for Clear Monitoring
- Up to 1080p 16CH Decoding Ability
- Smart Search II
- Smart VCA Event Search
- Cybersecurity Management
- Trend Micro IoT Security within Standard Warranty Period
- RAID 0, 1, 5 Supported to Prevent from Recording Data Loss
- Multiple Browsers Supported: IE, Chrome and Firefox on both Windows & macOS
- Supports VCA Counting Solution

Highlight Features

Core+ 3.0

VIVOTEK Core+ 3.0 is the new generation ND series Network Video Recorder firmware, embedded with VIVOTEK's latest technology that including smart search function and cybersecurity management, etc. To upgraded network video recorders ability, be smarter and safer. Core+ 3.0 provides ideal usability and a smoother user experience.

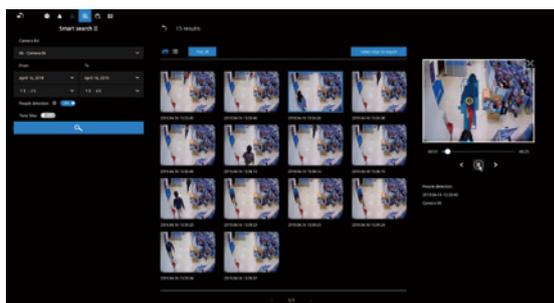
Trend Micro IoT Security & Cybersecurity Management

In collaboration with Trend Micro, VIVOTEK's video recorder is embedded with anti-intrusion software with multi-layer protection, including brute force attack detection, intrusion detection & prevention, and instant damage control. Furthermore, VIVOTEK's video recorder provides cybersecurity management solution. Once event notifications in video recorders have been set up, it will be immediately alerted when cyber attacks occur. Allowing users to receive notifications either automatically or manually, and real-time Cyber Risk Dashboard (VAST 2) to easily identify common types of cyber attacks.



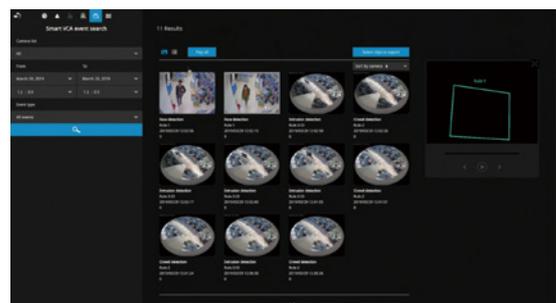
Smart Search II

Based on the camera metadata recorded in the Hard Disk Drive, the Network Video Recorder is able to carry out a video analysis search on playback. Users can quickly sort through large amounts of evidence to find precisely what is needed.



Smart VCA Event Search

VIVOTEK Core+ 3.0 supports alarm management and event search of VIVOTEK's deep-learning video analytic technology, which are Smart VCA, Smart 360 VCA and Smart Motion Detection.



VCA Counting Solution

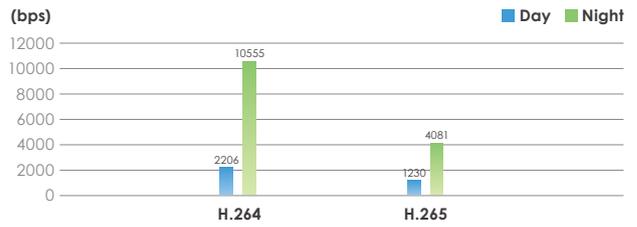
The NVR supports VIVOTEK's counting cameras and counting data storage. In local display mode, it can display the counting rule and the detected object information, as well as send that data to VIVOTEK's backend system for counting results analysis.



Highlight Features

H.265 1080P Real-time Live Display

Featuring a powerful multi-core SoC to provide 1080p (1920x1080) real-time live display so that users will not miss any information during monitoring, the NVRs also provide H.265 and VIVOTEK's Smart Stream technology to help greatly save recording capacity than regular H.264 systems.



4K IP Camera Video Input and 4K Local Video Output

Supporting 4K IP camera video input and 4K local video output, VIVOTEK's NVR can provide users extra high definition video resolution ensuring they will never miss a single detail in both video monitoring and recording.



4K Resolution

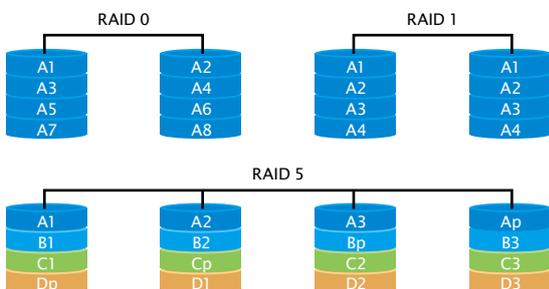
Chrome & Firefox Now Supported

Support for plug-in free web browsers enables users with direct web viewing/setting on IE, and now also on Chrome and Firefox web browsers, for both Windows and macOS.



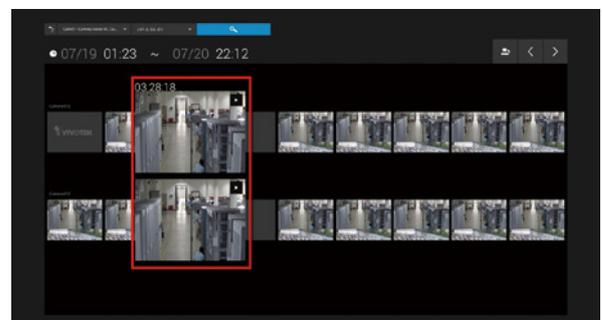
RAID

The RAID 0, 1, 5 configuration provides further data security and reliable video storage. (RAID Max. Volume: 16TB)



Story Board Event Search

To quickly and intuitively find any target event, we provide a glimpse of past recording over an intuitive timeline, allowing users to direct playback and archive their video within 10 seconds.



Highlight Features

Fisheye Dewarp

VIVOTEK's NVR offers both LiveView and Playback modes for one fisheye network camera simultaneously. They also provide multiple fisheye de-warp display modes, including 1O, 1P, 1R, 1O3R, 1O8R, allowing users to monitor any angle, or to enjoy precise detailed images for a total surveillance experience.



*Support LiveView and Playback modes

Product - Order Information

Model	Description	Part Number
ND9441	H.265, 16-CH, 4HDD NVR	100141300G, US
		100141310G, EU
		100141320G, UK
		100141330G, AU
ND9541	H.265, 32-CH, 4HDD NVR	100139900G, US
		100139910G, EU
		100139920G, UK
		100139930G, AU

Accessory - Order Information

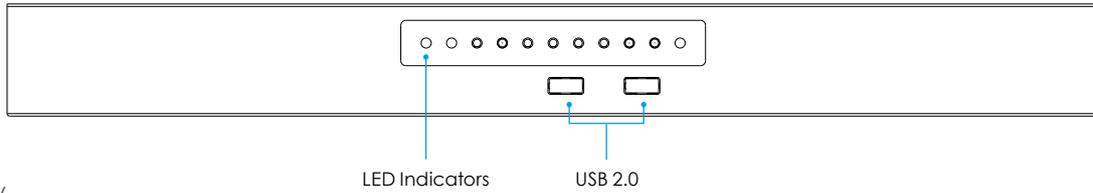
Model	Part Number
AM612 - Rack Mount Slide Rails	900030000G

PoE Switch - Order Information

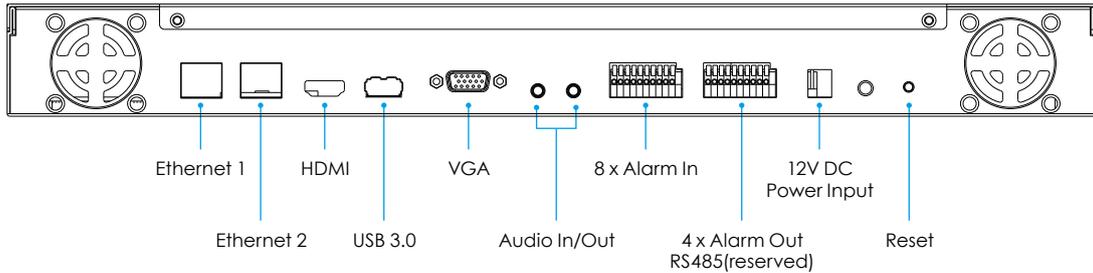
Model	Description	Part Number
AW-FGT-260C-380	Unmanaged 24xFE PoE + 2xCombo GE Switch	100128200G, US
		100128210Z, UK
		100128220Z, EU
		100128230G, AU
		100128240G, JP
AW-FGT-180C-250	Unmanaged 16xFE PoE + 2xCombo GE Switch	100130900G, US
		100130920G, UK
		100130910G, EU
		100130940G, AU
		100130930G, JP
AW-GEV-267A-370	VivoCam L2+ Managed PoE Switch, 24xGE PoE + 2xGE Combo + 1xRJ45 Console	100157000G, US
		100157020G, UK
		100157010G, EU
		100157030G, AU
		100157040G, JP

Mechanical Information

Front View



Back View



Technical Specifications

Model	ND9441 H.265 16-CH Embedded NVR	ND9541 H.265 32-CH Embedded NVR
Device		
OS	Embedded Linux	
CPU	ARM Processor	
Flash	256 MB	
RAM	2 GB	4 GB
Watchdog	Hardware + Software	
Power Restoration	System Restart Automatically after Power Recovery	
Local Display		
LiveView Display	16 Channels Multi Layout display: 1x1, 2x2, 3x3, 1P+3, 2P+3, 1M+5, 1P+6, 3V, 1M+12, 4x4	32 Channels Multi Layout display: 1x1, 2x2, 3x3, 1P+3, 2P+3, 1M+5, 1P+6, 3V, 1M+12, 4x4, 1M+31
Video Output	HDMI x1, VGA x1	
Display Resolution	3840x2160, 1920x1080, 1280x720	
Camera Position	Change the viewcell position on the Live View screens	
Stream Application	Constant\Auto Adaptive Stream	
Monitor Enhancement	OSD Display (NVR), OSD Display (Camera), Camera Information, Remote I/O Control, Event Notification, Aspect Ratio	
Fisheye Dewarp	1O, 1P, 1R, 1O3R, 1O8R	
PTZ Operation	Direction Control, Home, Iris, Preset, Patrol (Group), PiP Control	
Video		
Video Format	MJPEG, H.264, H.265	
Graphic Decoder	Hardware decoding	
Decoding Resolution	Up to 4096x4096 (H.265) 8192x8192 (H.264)	
Decoding Capability	H.265/H.264: 3840x2160 @ 120 fps (4-CH) 1920x1080 @ 480 fps (16-CH)	
Audio		

Technical Specifications

Model	ND9441 H.265 16-CH Embedded NVR	ND9541 H.265 32-CH Embedded NVR
Audio Format	G.711, G.726	
Audio In/Out	3.5 Phone Jack Audio Output x1 3.5 Phone Jack Audio Input (Reserved) x1	
Record		
Recording Time (sec.)	Pre-Record: 5 (Max. 10) Post-Record: 20 (Max. 300)	
Recording Stream	Single	
Recording Throughput	192 Mbps	
Recording Mode	Continuous, Schedule, Manual, Event, Activity Adaptive Streaming	
Recording Setting	Recycle (unit: Day)	
Watermark	Supported	
Storage & Backup		
HDD Devices	Internal x4 (3.5")	
HDD Max. Capacity	8 TB	
RAID	RAID 0, 1, 5	
Disk Management	Create, Format and Remove Disk HDD S.M.A.R.T	
External Storage	USB Storage (USB 3.0)	
Video Clip Export	USB Dongle (FAT Format)	
Schedule Backup	FTP	
Playback		
Playback Display	4 Channels Multi Layout Display: 1x1,2x2,1P+3,1V+3	
Playback Control	Regular (Play, Pause, Stop), Rewind, Next / Previous Frame, Speed Control, Calendar, Event, Timeline, Timeline Scale, Thumbnail (Storyboard)	
Video Search	By Calendar, Date/Time, and Alarm	
Thumbnail Explorer (Storyboard)	Listing the thumbnail of recorded video (Max. 2 CH)	
Snapshot	JPEG	
Video Clip Export	EXE	
Network		
Ethernet	10/100/1000Mbps Ethernet (RJ-45) x 2	
Video Throughput for Remote Client	96 Mbps	
Protocols	IPv4,TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, SMTP, FTP, DHCP, NTP, DNS, DDNS, IP Filter	
External Interface		
USB	Front: 2 (USB 2.0) Back: 1 (USB 3.0)	
Alarm In	8	
Alarm Out	4	
Audio	3.5 Phone Jack Audio Output x1 3.5 Phone Jack Audio Input (Reserved) x1	
RS485	1 Port (Reserved)	
System		
POS Integration	Supported (*by project)	
UPS Integration	Supported (*by project)	
Camera Integration	ONVIF Profile S	
Event	Motion Detection, Smart VCA Event, Cyber Attack, PIR Detection, Tampering Detection, Camera DI/DO, Camera Disconnected, Disk Failure, Disk Full, NVR DI/DO, Network disconnected	

Technical Specifications

Model	ND9441 H.265 16-CH Embedded NVR	ND9541 H.265 32-CH Embedded NVR
Event Action	Record, Email (Text), Email (Snapshot), FTP, Buzzer, ePTZ Control (Go to Preset), NVR DO, Camera DO, VIVOCloud APP Notification	
User Management	User level: administrator, regular user	
Log	System, Recording, User, Error	
Date&Time	Time Zone, Manual, Automatic Sync NTP, Daylight Saving Time	
Language	Czech, English, French, German, Italian, Japanese, Korean, Portuguese, Polish, Russian, Spanish, Simplified Chinese, Traditional Chinese	
Advance Features		
VCA Counting Solution	Supported	
Smart VCA Event	Supported	
Smart Search II	Supported	
Trend Micro IoT Security	Supported	
Cybersecurity Management	Supported	
Remote Client		
Software AP	Shepherd ,VAST 2	
Mobile/Tablet App	iViewer (Android & iOS)	
Web Browser	Internet Explorer 10 (32 bit) or above/ Windows Chrome v68.0.3 & Firefox v61.02 or above/ Windows & macOS	
VIVOCloud	Supported	
General		
Power Input	DC 56V 2.32A	
Power Consumption	Max. 120 W	
Dimensions	430 (W) x 400 (D) x 44.5 (H) mm	
Weight	3.87 kg (without HDD)	
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	
Humidity	0 ~ 95%	
Safety Certifications	CE, LVD, FCC, VCCI, C-Tick, UL	
Dimensions		

