





# ND9441 ND9541

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



H.265/H.264 · 4x HDD · ONVIF · Dual LAN · Fisheye Dewarp · RAID · HDMI/VGA Monitor Display · Storyboard Search · Mobile EZConnect

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 EZConnect 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  $30\% \sim 50\%$  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 temporally 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.

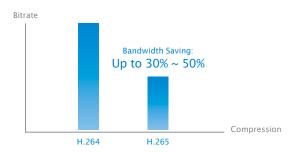
#### **Features**

- · H.265/H.264 Compression Technology
- · Plug & Play One Button Auto Setup
- EZConnect by Scanning QR Code for 24/7 Mobile Viewing
- · Intuitive, Elegant Interaction UI
- VIVOTEK Camera Configuration and VAST CMS Integrated

- · Live and Playback Fisheye Dewarp
- · Embedded Linux OS
- · Support RAID 0/1/5 Storage
- · Story Board Event Search
- · Up to 12MP Camera Liveview & Playback
- $\cdot$  Dual Lan Network Ports with Failover Function
- · ONVIF Open Platform (Project Support Function)

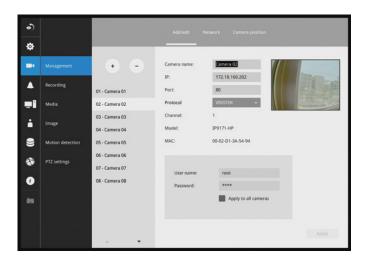
#### **H.265 Compression Technology**

To provide high-quality images and efficient video compression for today's surveillance applications, VIVOTEK presents these two NVRs. Endowed with H.265 technology; these NVRs offer more than 30%  $\sim 50\%$  greater recording capacity than systems employing H.264 compression - effectively giving users larger storage capacity for longer durations of high-quality video recording.



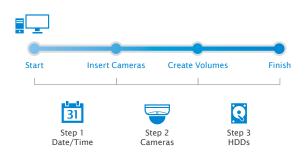
#### **Intuitive UI**

With a friendly and elegant interactive design, users can enjoy the benefit of simple operation and a UI that's easy on the eyes.



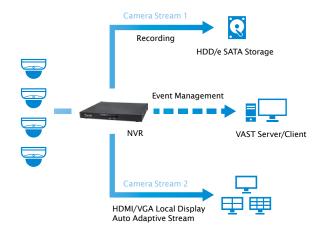
## **One Button Setup**

In order to provide users a highly intuitive experience, VIVOTEK's NVRs provide Auto- Wizard for convenient system set-up, which takes less than 2 minutes to finish it.



## **Auto Adaptive Stream**

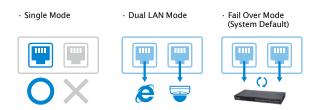
With the "Automatic Adaptive Stream" function, the resolution of a Camera's second Stream will be adjusted automatically according to the display layout selected, thus reducing network bandwidth and saving on total project costs.





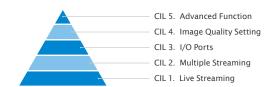
#### **Dual LAN Application**

The ND9441 and the ND9541 are equipped with dual Ethernet ports, providing the flexibility to cope with a network failover situation, as well as load-balancing or multi-IP setting.



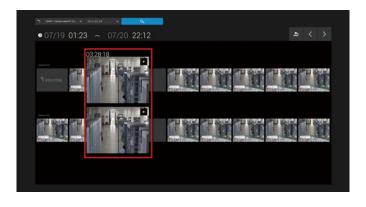
#### **CIL 5 (Camera Integration Level)**

VIVOTEK'S NVR provides a powerful camera integration to Level 5, which integrates the camera's streaming adjustment, camera I/O configuration, Image adjustment, and fisheye de-warp function application.



#### **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.



# 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 10, 1P, 1R, 103R, 108R, allowing users to monitor any angle, or to enjoy precise detailed images for a total surveillance experience.



\*Support LiveView and Playback modes

#### **EZConnect**

EZConnect App provides users an unbeatable experience for mobile viewing NVR video via a mobile device from anywhere, at any time.

## EZConnect



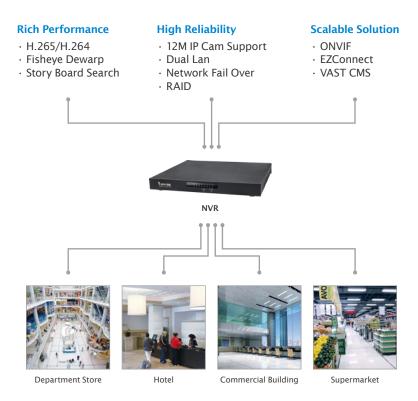
#### **VAST CMS Integration**

VIVOTEK'S NVR is both CMS compliant and a totally scalable configuration thanks to VAST CMS. This powerful tool enables users to set up and manage advanced IP surveillance systems with ease.



- · Camera Disconnection
- · Motion Detection
- · Camera Tempering Detection
- · Camera Digital Input Trigger Event
- · HDD Fail Events
- · Camera Recording Status





# **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**

Part Number
900029300G
900022500G
900022400G
900022300G
900029100G
900030000G

# PoE Switch - Order Information

Model	Description	Part Number
AW-FGT-260A-250	Unmanaged 24xFE PoE + 2xCombo GE Switch	100128200G, US
		100128210Z, UK
		100128220Z, EU
		100128230G, AU
		100128240G, JP
AW-FGT-180A-250	Unmanaged 16xFE PoE + 2xCombo GE Switch	100130900G, US
		100130920G, UK
		100130910G, EU
		100130940G, AU
		100130930G, JP
AW-GEV-264A-185	VivoCam L2 Managed PoE Switch 24xGE PoE + 2xCombo GE	100129600G, US
		100129620G, UK
		100129610G, EU
		100129630G, AU
		100129640G, JP

# **Mechanical Information**





# **Technical Specifications**

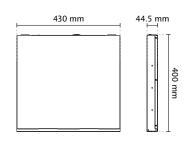
Model	ND9441 16-CH H.265 Embedded NVR	ND9541 32-CH H.265 Embedded NVR
Hardware Information		
System		
OS	Embedde	ed Linux
CPU	ARM Pro	
Flash	256	
RAM	2 GB	4 GB
Watchdog	Hardware +	
Power Restoration	System Restart Automatica	ally after Power Recovery
Storage		
HDD Devices	Interna	al x4
HDD Max. Capacity	8 TB	3 x4
Dial. Managament	Create, Format ar	nd Remove Disk
Disk Management	HDD S.N	M.A.R.T
Video & Audio		
Video Output	HDMI x1,	VGA x1
Resolution	1920x1080,	
Graphics Decoder	Hardware (	
Decoding Capacity	H.265/H.264: 2560x1920 @ 30 fps (1-CH) 1920x1080 @ 120 fps (4-CH) 1280x720 @ 240 fps (8-CH) 1280x720 @ 480 fps (16-CH)	H.265/H.264: 2560x1920 @ 30 fps (1-CH) 1920x1080 @ 120 fps (4-CH) 1280x720 @ 240 fps (8-CH) 1280x720 @ 480 fps (16-CH) 720x420 @ 480 fps (32-CH)
Camera Position	Change the viewcell position	n on the Live View screens
External Interface		
	Front: 2 (	USB 2.0)
JSB Interface	Back: 1 (L	
Alarm In	8	
Alarm Out	4	
	3.5 Phone Jack A	
Audio	3.5 Phone Jack Audio	
RS485	1 Port (Re	
Network	1 FOIL (NO	
	10/100/1000/1	Ethernet (PLAS) v 2
Network Interface	10/100/1000Mbps Ethernet (RJ-45) x 2	
Protocols	IPv4, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, SMTP, FTP, DHCP, NTP, DNS, DDNS, IP Filter	
Power		
Power Input	DC 56V 2.32A	
Power Consumption	Max. 1	20 W
LED Indicator		
ED Indicator	Status, Record, HDD1, HDD2	2, HDD3, HDD4, Net1, Net2
Mechanic Mechanic		
Form Factor	Deal	rton
	Desk	
Operation Buttons	Power (Front) / Reset (Back)	
Dimensions	430 (W) x 400 (D) x 44.5 (H) mm	
Weight	3.87 kg (wit	
Operating Temperature	0°C ~ 40°C (3.	2°F ~ 104°F)
Humidity	0 ~ 9	95%
General		
Safety Certifications	CE, LVD, FCC	C, VCCI, UL
Warranty	24 mo	
	24 1110	
Client PC Requirements	W6.W. 1	(D/Viere /7/9/2009/2012
Operating System	Microsoft Windows OS: X	
CPU	Intel Celeror	
Memory	2 GB or	
Ethenet	10/100	
Display Resolution	1024x768 pix	sels or above
Web Browser	Internet Explorer 10	
Software AP	Installation Wizard	
Mobile/Tablet App	EZConnect (iOS/Android)	
Accessories		
CD	User's Manual, Quick Installation (	Guide (OIC) Installation Wizard 2
Others	Power Adapter, Power Cord, Quick Installation Guide, 32 x H.D.D.	ט. ט.ופשא, ס x ח.ט.ט. Brackets, T x USB Mouse, 4 x SATA Cables
Software Information		
Record		
Maximum Channel	16	32
Record Throughput (MB)	192 Mbps	192 Mbps
Network Throughput (MB)	96 M	
Audio Format	G.711, 0	
/ideo Format		
/ideo Resolution	MJPEG, H.264, H.265	
	VGA, 1MP, 2MP, 3MP, 5MP & 12MP Camera	
Array Type	RAID 0, 1, 5	
Recording Time (sec.)	Pre-Record: 5 (Max. 10)	
Recording Stream	Post-Record: 20 (Max. 300) Single	
Recording Stream		
Recording Mode	Continuous, Schedule, Manual, Event, Activity Adaptive Streaming	
Recording Setting	Recycle (u	
Recording Path	Local	
Record Video Format	3G	P
LiveView (Local Display)		
Stream Application	Auto Adapti	ive Stream
	16 Channels	32 Channels
LiveView Display	Multi Layout display:	Multi Layout display:



# **Technical Specifications**

Model	ND9441 16-CH H.265 Embedded NVR	ND9541 32-CH H.265 Embedded NVR	
Monitor Enhancement		OSD Display (NVR), OSD Display (Camera), Camera Information, Remote I/O Control, Event Notification, Aspect Ratio, Fisheye Dewarp (10,1P.1R.103R, 108R)	
PTZ Control	Panel	Control	
PTZ Operation	Direction Control, Home, Iris, F	Direction Control, Home, Iris, Preset, Patrol (Group), PIP Control	
Playback (Local Display)			
Playback Display		4 Channels	
Playback Control		Multiple Layout Display: 2x2	
Video Search		Regular (Play, Pause, Stop), Rewind, Next / Previous Frame, Speed Control, Calendar, Event, Timeline, Timeline Scale, Thumbnail (Storyboard)	
		By Calendar, Date/Time, and Alarm Listing the thumbnail of recorded video (Max. 2 CH)	
Thumbnail Explorer (Storyboard)  Monitor Enhancement	3	•	
Snapshot		OSD Display (Camera), Event Notification, Aspect Ratio, PiP Control, Fisheye Dewarp (10,1P,1R,103R, 108R)  IPEG	
Video Clip Export	-	XE	
LiveView (Remote)		AL .	
	Chanana	Calantian	
Stream Application		Selection	
Audio Capability	One 16 Channels	e Way 32 Channels	
LiveView Display	Multi Layout display: 1x1, 2x2, 3x3, 4x4, 1+3, 1+5, 1+12	Multi Layout display: 1x1, 2x2, 3x3, 4x4, 1+3, 1+5, 1+12, 1+31	
Monitor Enhancement		e I/O Control, Event Notification, Bookmark, Fisheye Dewarp (10, 1P, 1R)	
PTZ Control		Control	
PTZ Operation		s, Iris, Preset, Patrol (Group), PiP Control	
Snapshot	JF	PEG	
Playback (Remote)			
Playback Display		4 Channels Multi Layout Display: 1x1, 2x2, 1+3	
Playback Control	Regular (Play, Pause, Stop), Next Frame, Speed Co	ntrol, Calendar, Timeline, Timeline Scale, Bookmark	
Monitor Enhancement		ntrol, PiP Control, Fisheye Dewarp (10, 1P, 1R)	
Snapshot	JI .	PEG	
Video Clip Export	E	XE	
Alarm Management			
Schedule Type	Continuous, So	Continuous, Schedule, Manual	
Event		Motion Detection, PIR Detection, Tampering Detection, Digital Input (Camera), Digital Output (Camera), Connection Abnormal, Storage Abnorm Storage Full, Camera Network Loss, DI, DO	
Action	-	r, ePTZ Control (Go to Preset), NVR DO, Camera DO	
Recording Time (sec.)		Post-Record: 20 (Max. 300)	
Backup			
Manual	LISR Donale	(FAT Format)	
System	ob Bongie	(The Formal)	
User Management	User Account Ti User Level: Adminis	User Account: 16 User Account Time Limit: 10 mins User Level: Administrator / Regular User User Feature Definition: By Camera	
Log	System, Recor	ding, User, Error	
Date&Time		Sync NTP, Daylight Saving Time	
Firmware		l update	
Restore Default	Supp	ported	
Backup/Restore (Configuration)	Supp	ported	
Language	Czech, English, French, German, Italian, Japanese, Korean, Polish, P	ortuguese, Russian, Spanish, Simplified Chinese, Traditional Chinese	
Camera Intergration			
Insert Camera	Manua	l, Search	
Video (Media) Setting	Compression, Resolu	tion, FPS, Video Quality	
Image Setting	Image A	Image Display Image Adjustment	
PTZ Control		Panel Control	
PTZ Operation		Direction Control, Home, Preset, Patrol (Group)	
Motion Detection		Supported	
ONVIF Core Spec		Version 2.2 or above (By Project)	
ONVIF Stream		Video (H.264, MPEG4 & MJPEG)	
ONVIF Recording		Continuous, Schedule, Manual	
ONVIF Discover		Discover the other brand camera through "Insert Camera & Batch Insert"	
Device Intergration			
UPS	ADC Model	Compatible	
0.0	AFC Widde	companie	

## **Dimensions**



All specifications are subject to change without notice. Copyright © VIVOTEK INC. All rights reserved.



