



# ND8212W

4-CH Embedded Wi-Fi NVR



H.264 • 1x HDD • HDMI • Wi-Fi • VIVOCLOUD • ONVIF •  
Support 4CH Wi-Fi + 4CH Wired

VIVOTEK's ND8212W is a H.264 4-CH Linux-based standalone Wi-Fi NVR that supports a single 3.5" HDD up to 6TB. The ND8212W supports remote access via VIVOTEK's VIVOCLOUD and iViewer apps for both iOS and Android mobile devices, enabling users access to their video anytime, anywhere. The VIVOCLOUD app provides instant push notification and direct video playback functionalities when triggered by an alarm notification, providing seamless security for small-sized video surveillance applications.

Furthermore, the ND8212W is fully integrated with VIVOTEK's VAST/VAST 2 VMS, so users can enjoy the easy-to-use IP surveillance system to protect lives and property more efficiently. With a compact size and fan-less design, the ND8212W is ideal for any small-scale video surveillance installation.

## Key Features

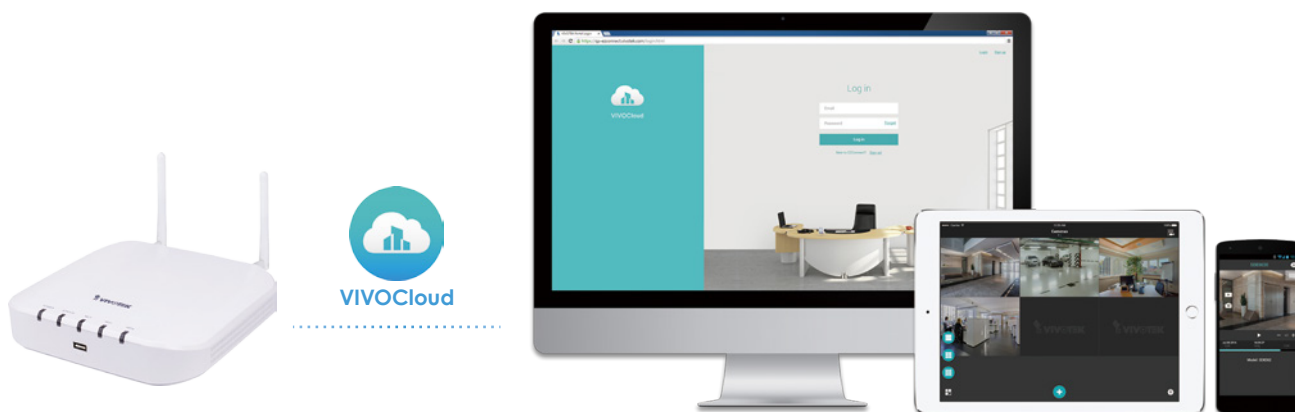
- H.264 Compression Technology
- Up to 4CH Wi-Fi + 4CH Wired IP Camera Input
- HDMI Video Output up to 4K Resolution
- 1 x 3.5" SATA HDD up to 6TB
- Up to 8MP Camera Liveview and Playback
- VIVOCLOUD App & Portal for 24/7 Viewing
- Easy Connection with IP Cameras and Quick Auto Setup
- Instant Playback Fisheye Dewarp
- 2.4Ghz 802.11 b/g/n Wi-Fi Connection
- ONVIF Compliance (Project Support Function)
- Compact Size with Fanless Design

## Highlight Features

### VIVOCLOUD App & Portal for 24/7 Viewing

The free VIVOCLOUD app makes surveillance lightweight and portable, ensuring efficient operation. The latest P2P technology makes remote access even more convenient, by simply scanning the QR-code and installing the app, users can view live streams and play recorded clips

with the intuitive interface anytime, anywhere. Armed with the Push Notification function, users will directly get an alert message on their Android/iOS mobile device and directly playback the video to check for any suspicious activity.



### Easy Connection with IP Cameras and Quick Auto Setup

In order to provide users a highly intuitive experience, WPS allows for the IP cameras' positions and connects to the NVR without entering long passphrases. Auto Setup Wizard then conveniently sets up a centralized configuration to reduce connection times to within 4 minutes.

WPS connects to the "NVR and IP Cameras" versus "Router and IP Cameras". It not only saves time up to 60%, but also greatly reduces the difficulty of the device's settings. Honest to say, users may not know what happens between the connection of the NVR and the router.

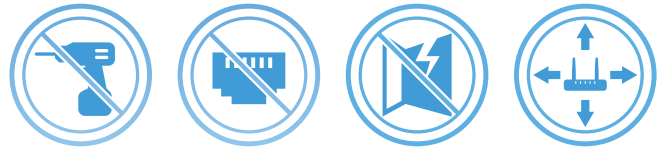


## Highlight Features

### Enjoy the Benefits of Wi-Fi

This next generation NVR supports up to 4 IP cameras via 2.4Ghz Wi-Fi connection.

- Easy installation without spending more huge cost and time.
- No drilling and network socket needed.
- Less potential damage and more aesthetically pleasing.
- Easily move or reposition after installed.



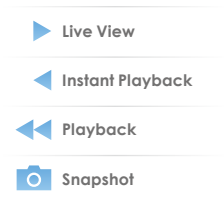
### 4 Display Modes for Fisheye Dewarp

VIVOTEK's fisheye camera is able to provide 360 degree coverage for wide, open areas, such as retail stores, offices and more. VIVOTEK's NVR offers four display modes for one fisheye network camera simultaneously:

LiveView, Playback, Snapshot and Instant Playback. With VIVOTEK's unique technology Instant Playback Dewarp, users can quickly review the image and react immediately.



Dewarp



### 4CH 1080P Resolution Video Storage over 40 Days

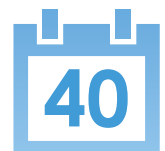
To provide both high-quality video and longer duration storage, the NVR allows users to effectively record 1080P resolution video continuously for up to 40 days without any extra monthly fee. This is the best choice to satisfy users' recording needs. (video throughput: 3M)



3.5" 6TB HDD



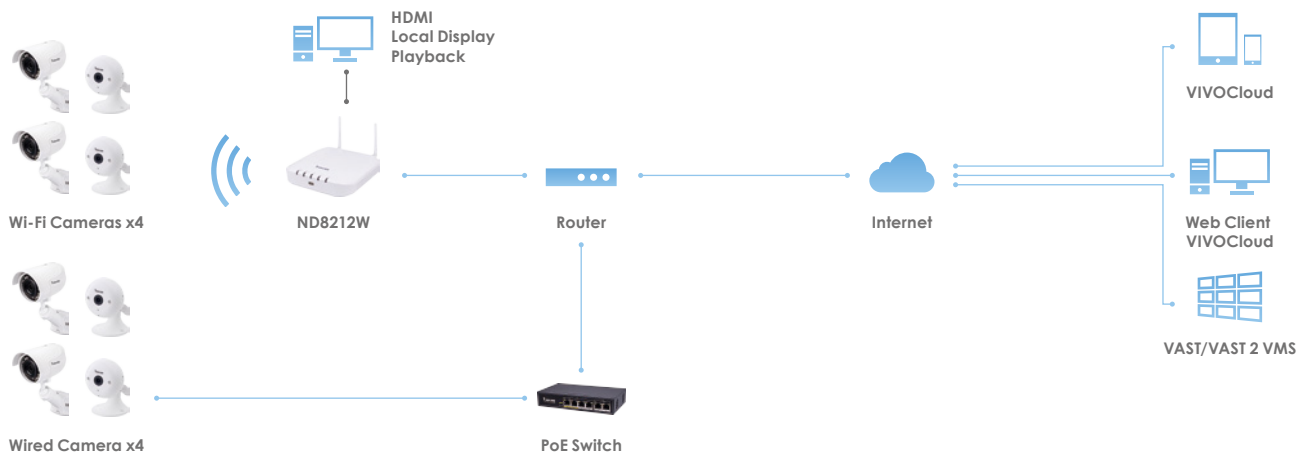
24/7



40 Days

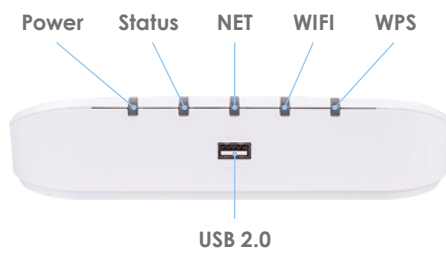
# System Structure

## Wi-Fi/Wired Cameras with WAN Solution

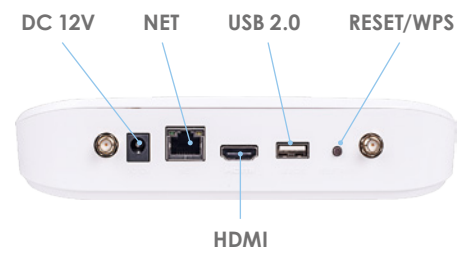


# Mechanical Information

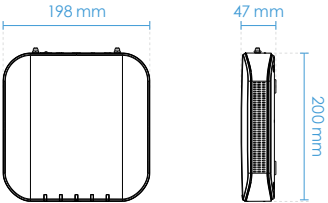
## Front View



## Back View



## Technical Specifications

Hardware Information		Form Factor	Desktop
Model	ND8212W	Operation Buttons	Reset/WPS (Back)
System		Dimensions	198 (W) x 200 (D) x 47(H) mm
OS	Embedded Linux	Weight	560 g (without HDD)
CPU	ARM Processor	Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)
Flash	256 MB	Humidity	0 ~ 95%
RAM	1GB	General	
Watchdog	Hardware + Software	Safety Certifications	CE, LVD, FCC, VCCI, C-Tick, MIC, NCC, BSMI
Power Restoration	System Restart Automatically after Power Recovery	Warranty	24 months
Storage		Client PC Requirements	
HDD Devices	Internal x1	Operating System	Microsoft Windows OS: XP/Vista/7/8/10/2008/2012
HDD Max. Capacity	6TB x1	CPU	Intel Celeron or above
Disk Management	Create, Format and Remove Disk HDD S.M.A.R.T	Memory	2 GB or above
Video & Audio		Ethernet	10/100Mbps
Video Output	HDMI x1	Display Resolution	1024x768 pixels or above
Resolution	3840x2160, 1920x1080, 1280x720	Web Browser	Internet Explorer 10 (32 bit) or above
Graphics Decoder	Hardware decoding	Software AP	Installation Wizard 2, Shepherd, VAST, VAST 2
Decoding Capacity	H.264: 3840x2160 @ 30 fps (1CH) 1920x1080 @ 120 fps (4CH) 1280x720 @ 240 fps (8CH)	Mobile/Tablet App	VIVOCloud, iViewer (iOS) VIVOCloud, iViewer (Android)
Camera Position	Change the viewcell position on the Live View screens	Cloud Connection	VIVOCloud Portal
External Interface		Accessories	
USB Interface	Front: 1 (USB 2.0) Back: 1 (USB 2.0)	Others	Power adaptor, QIG, 8 x HDD screw, 2 x HDD Brackets, 1 x USB Mouse, 2 x 2.4Ghz Wi-Fi Antenna
Audio	HDMI Audio Output	Dimensions	
Network			
Network Interface	10/100Mbps Ethernet (RJ-45) x 1	Software Information	
Wi-Fi	2.4Ghz 802.11 b/g/n	Record	
Protocols	IPv4, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/ RTCP, SMTP, FTP, DHCP, NTP, DNS, DDNS, IP Filter, WPS	Maximum Channel	Up to 8 (4CH Wi-Fi + 4CH Wired)
Power		Record Throughput (MB)	24 Mbps, default settings: 1920X1080 @ 32 fps (4CH)
Power Input	DC 12V 3A	Network Throughput (MB)	40 Mbps
Power Consumption	Max. 15.6 W	Audio Format	G.711, G.726
LED Indicator			
LED Indicator	Power, Status, NET, Wi-Fi, WPS		
Mechanic			

## Technical Specifications

Video Format	MJPEG, H.264
Video Resolution	UP to 8MP Camera
Recording Time (sec.)	Pre-Record: 5 (Max. 10) Post-Record: 20 (Max. 300)
Recording Stream	Single
Recording Mode	Continuous, Schedule, Manual, Event, Activity Adaptive Streaming
Recording Setting	Recycle (unit: day)
Recording Path	Local Path
Record Video Format	3GP
Watermark	Supported
Schedule Backup	Supported

### LiveView (Local Display)

Stream Application	Constant/Auto Adaptive Stream
LiveView Display	8 Channels (4CH Wi-Fi + 4CH Wired) Multiple Layout Display: 1x1, 3V, 2x2, 3x3, 1P+3, 2P+3, 1M+5, 1P+6
Monitor Enhancement	OSD Display (NVR), OSD Display (Camera), Camera Information, Remote I/O Control, Event Notification, Aspect Ratio, Fisheye Dewarp (1O, 1P, 1R, 1O3R, 1P3R, 1O8R)
PTZ Control	Panel Control/Joystick
PTZ Operation	Direction Control, Home, Iris, Preset, Patrol (Group), PiP Control

### Playback (Local Display)

Playback Display	4 Channels Multiple 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, Alarm
Thumbnail Explorer (Storyboard)	Listing the thumbnail of recorded video (Max. 2 CH)
Monitor Enhancement	OSD Display (Camera), Event Notification, Aspect Ratio, PiP Control, Fisheye Dewarp (1O, 1P, 1R, 1O3R, 1P3R, 1O8R)
Snapshot	JPEG
Video Clip Export	EXE

### LiveView (Remote)

Stream Application	Stream Selection
Audio Capability	One Way
LiveView Display	4 Channels Multi Layout Display: 1x1, 2x2, 1V+3
Monitor Enhancement	OSD Display (NVR), Drag & Drop, Image Freeze, Audio Control, Remote I/O Control, Event Notification, Bookmark, Fisheye Dewarp (1O, 1P, 1R)

PTZ Control	Panel Control
PTZ Operation	Direction Control, Home, Zoom, Focus, Iris, Preset, Patrol (Group), PiP Control
Snapshot	JPEG

### Playback (Remote)

Playback Display	4 Channels Multiple Layout Display: 1x1, 2x2, 1V+3
Playback Control	Regular (Play, Pause, Stop), Next Frame, Speed Control, Calendar, Timeline, Timeline Scale, Bookmark
Monitor Enhancement	OSD Display (NVR), Drag & Drop, Audio Control, PiP Control, Fisheye Dewarp (1O, 1P, 1R)
Snapshot	JPEG
Video Clip Export	EXE

### Alarm Management

Schedule Type	Continuous, Schedule, Manual
Event	Motion Detection, PIR Detection, Tampering Detection, Digital Input (Camera), Digital Output (Camera), Connection Abnormal, Storage Abnormal, Storage Full, Camera Network Loss
Action	Record, Email (Text), Email (Snapshot), FTP, Buzzer, ePTZ Control (Go to Preset), Camera DO, VIVOCLOUD APP Notification
Recording Time (sec.)	Pre-Record: 5 (Max. 10) Post-Record: 20 (Max. 300)

### Backup

Manual	USB Dongle (FAT Format), FTP Server Upload
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### System

User Management	User Account: 16 User Account Time Limit: 10 mins User Level: Administrator/Regular User User Feature Definition: By Camera
Log	System, Recording, User, Error
Date&Time	Time Zone, Manual, Automatic Sync NTP, Daylight Saving Time
Firmware	Manual update
Restore Default	Supported
Backup/Restore (Configuration)	Supported
Language	Czech, English, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish, Simplified Chinese, Traditional Chinese, Polish

### Camera Integration

Insert Camera	Manual, Search
Video (Media) Setting	Compression, Resolution, FPS, Video Quality
Image Setting	Image Display, Image Adjustment

## Technical Specifications

Motion Detection	Supported
ONVIF Core SPEC.	Version 2.2 or above (By Project)
ONVIF Stream	Video (H.264 & MJPEG)
ONVIF Recording	Continuous, Schedule, Manual
ONVIF Discover	Discover other brand camera through "Insert Camera & Batch Insert"