



# ND8312

8-CH Standalone Desktop NVR



H.264 • 8-CH • 1xHDD • HDMI • VIVOCLOUD • ONVIF

VIVOTEK's ND8312 is a H.264 8-CH Linux-based standalone NVR that supports a single 3.5" HDD up to 6TB. The ND8312 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 ND8312 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 ND8312 is ideal for any small-scale video surveillance installation.

## Key Features

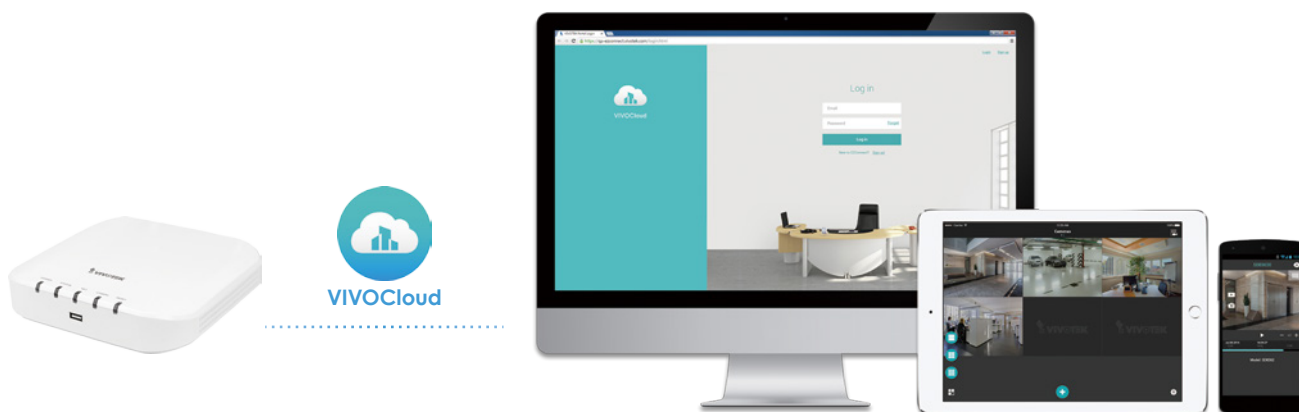
- H.264 Compression Technology
- Up to 8 Channel IP Camera Input
- HDMI Video Output up to 4K Resolution
- 1 x 3.5" SATA HDD Up to 6TB
- Up to 8MP Camera Liveview and Playback
- VIVOCLOUD App & Portal for 24/7 Viewing
- Easy Connection with IP Camera and Quick Auto Setup
- Scheduled Backup
- Instant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

# Highlight Features

## VIVOCloud App & Portal for 24/7 Viewing

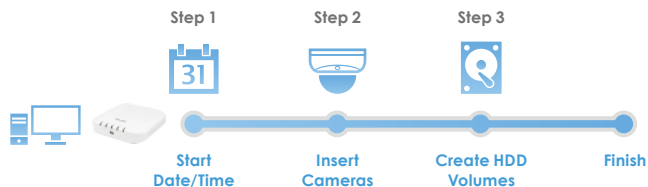
The free VIVOCloud app makes surveillance lightweight and portable, ensuring efficient operation. The latest P2P technology makes remote access even more convenient, by simply scanning the QR-code and installing the app, users can view live streams and play recorded clips

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, it 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 2 minutes.



## 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.

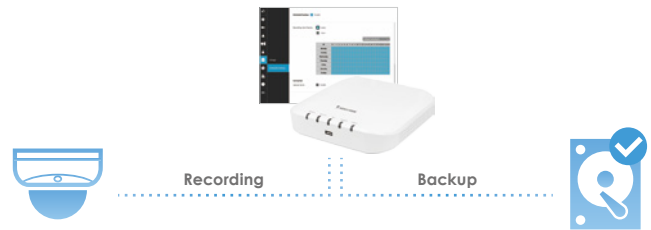


- ▶ Live View
- ◀ Instant Playback
- ◀ Playback
- 📷 Snapshot

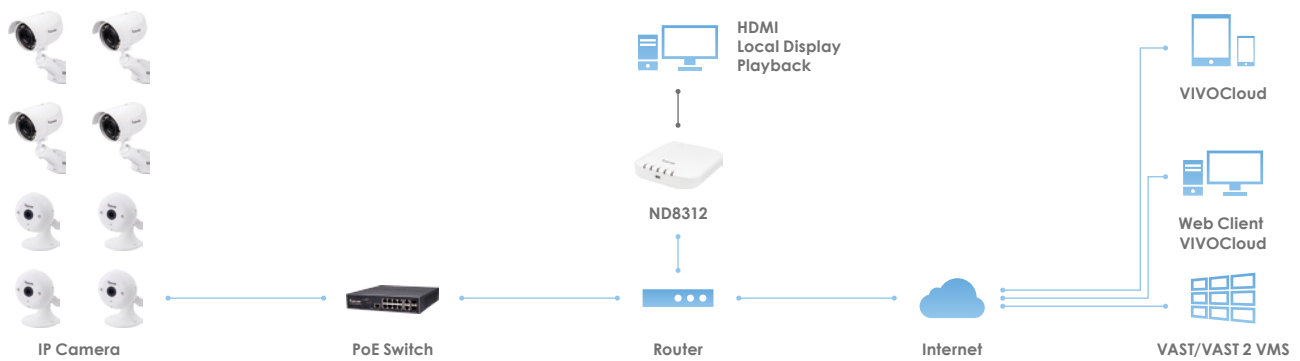
## Highlight Features

### Scheduled Backup

VIVOTEK's NVR provides auto backup of video data to ftp function, increasing storage flexibility and protecting the integrity of information.

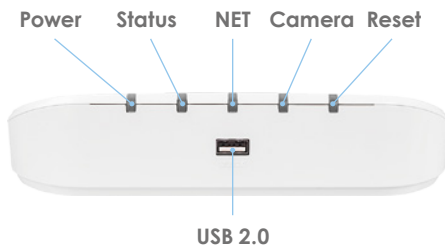


## System Structure

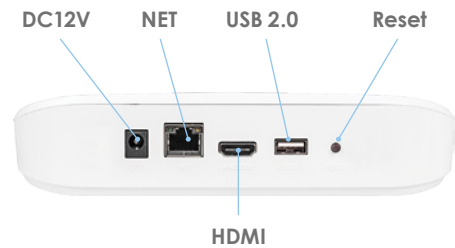


## Mechanical Information

### Front View



### Back View



## Technical Specifications

### Hardware Information

Model ND8312

### System

OS Embedded Linux

Watchdog Hardware + Software

Power Restoration System Restart Automatically after Power Recovery

### Storage

HDD Devices Internal x1

HDD Max. Capacity 6TB x1

Disk Management Create, Format and Remove Disk  
HDD S.M.A.R.T

### Video & Audio

Video Output HDMI x1

Resolution 3840x2160, 1920x1080, 1280x720

Graphics Decoder Hardware decoding

Decoding Capacity H.264:  
3840x2160 @ 30 fps (1CH)  
1920x1080 @ 120 fps (4CH)  
1280x720 @ 240 fps (8CH)

Camera Position Change the viewcell position on the Live View screens

### External Interface

USB Interface USB 2.0 x 2 (Front x1, Back x1)

Audio HDMI Audio Output

### Network

Network Interface 10/100Mbps Ethernet (RJ-45) x 1

Protocols IPv4, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/  
RTCP, SMTP, FTP, DHCP, NTP, DNS, DDNS, IP  
Filter

### Power

Power Input DC 12V 3A

Power Consumption Max. 15 W

### LED Indicator

LED Indicator POWER, STATUS, NET, CAMERA, RESET

### Mechanic

Form Factor Desktop

Operation Buttons Reset

Dimensions 198 (W) x 200 (D) x 47 (H) mm

Weight 530 g (without HDD)

Operating Temperature 0°C ~ 40°C (32°F ~ 104°F)

Humidity 0 ~ 95%

### General

Safety Certifications CE, LVD, FCC, VCCI, C-Tick

Warranty 24 months

### Client PC Requirements

Operating System Microsoft Windows OS:  
XP/Vista/7/8/10/2008/2012

CPU Intel Celeron or above

Memory 2 GB or above

Ethernet 10/100Mbps

Display Resolution 1024x768 pixels or above

Web Browser Internet Explorer 10 (32 bit) or above

Software AP Installation Wizard 2, Shepherd, VAST, VAST2

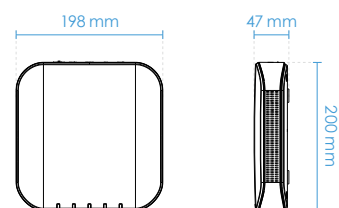
Mobile/Tablet App VIVOCloud, iViewer (iOS)  
VIVOCloud, iViewer (Android)

Cloud Connection VIVOCloud Portal

### Accessories

Others Power adaptor, QIG, 8 x HDD screw, 2 xHDD  
Brackets, 1 x USB Mouse

### Dimensions



### Software Information

#### Record

Maximum Channel 8

Record Throughput (MB) 48 Mbps, default setting:  
1920x1080 @ 64 fps (8-CH)

Network Throughput (MB) 40 Mbps

Audio Format G.711, G.726

## 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 Multi 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 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, 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	8 Channels Multi Layout Display: 1x1, 2x2, 3x3, 1V+3, 1M+5
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 Multi 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

## Technical Specifications

Language	Czech, English, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish, Simplified Chinese, Traditional Chinese, Polish
<b>Camera Integration</b>	
Insert Camera	Manual, Search
Video (Media) Setting	Compression, Resolution, FPS, Video Quality
Image Setting	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 & MJPEG)
ONVIF Recording	Continuous, Schedule, Manual
ONVIF Discover	Discover other brand camera through "Insert Camera & Batch Insert"
<b>Device Integration</b>	
UPS	APC Model Compatible
Joystick	AJ-001, AJ-002