VIVOTEK

C series 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 forany suspicious activity.

VIVOCloud
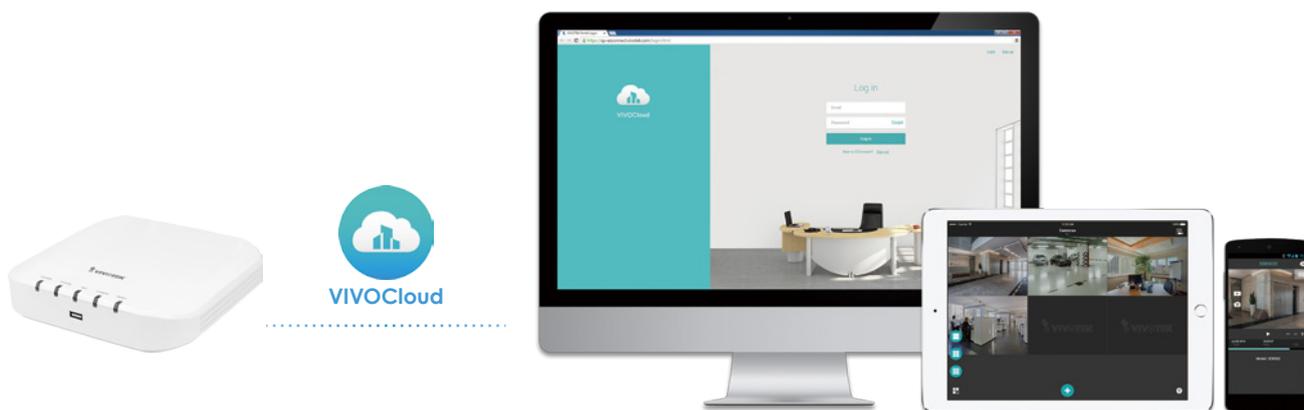
Easy Connection with IP Cameras and Quick Auto Setup

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.

Step 1	Step 2	Step 3	
Start Date/Time	Insert Cameras	Create HDD Volumes	Finish
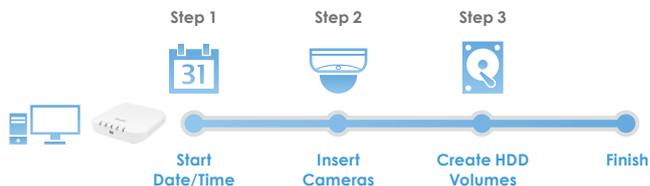
4 Display Modes for Fisheye Dewarp

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

Live View
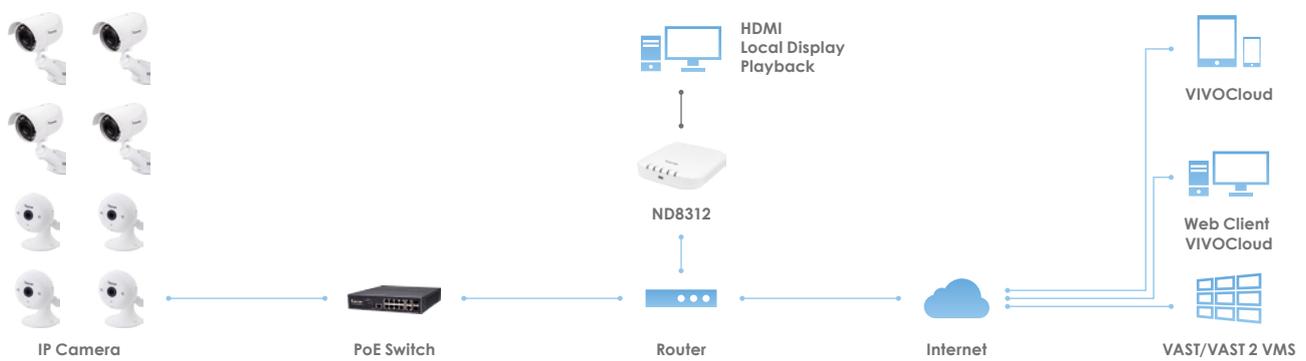
Instant Playback

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.

Recording   Backup

System Structure

IP Camera

PoE Switch

Router

Internet

ND8312

HDMI
Local Display
Playback

VIVOCloud

Web Client
VIVOCloud

VAST/VAST 2 VMS

Mechanical Information

Front View

Power   Status   NET   Camera   Reset

USB 2.0

Back View

DC12V   NET   USB 2.0   Reset

HDMI
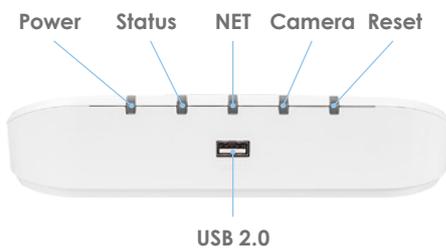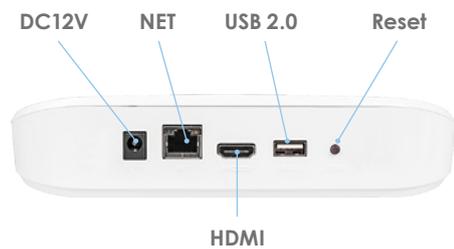
Technical Specifications

Hardware Information

Model	ND8312

System

OS	Embedded Linux
CPU	ARM Processor
Flash	256 MB
RAM	1GB
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
Ethenet	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
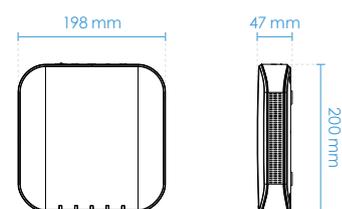
Software Information

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
Video Format	MJPEG, H.264
Video Resolution	UP to 8MP Camera

Technical Specifications

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

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
PTZ Control	Panel Control

Technical Specifications

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 "
Device Integration	
UPS	APC Model Compatible
Joystick	AJ-001, AJ-002