

ND8322P

8-CH Embedded Plug & Play NVR



8x PoE Ports · 2x HDD · RAID · Fisheye Dewarp · Mobile VIVOCloud · Auto Adaptive Stream · HDMI/VGA Monitor Display · ONVIF · POS

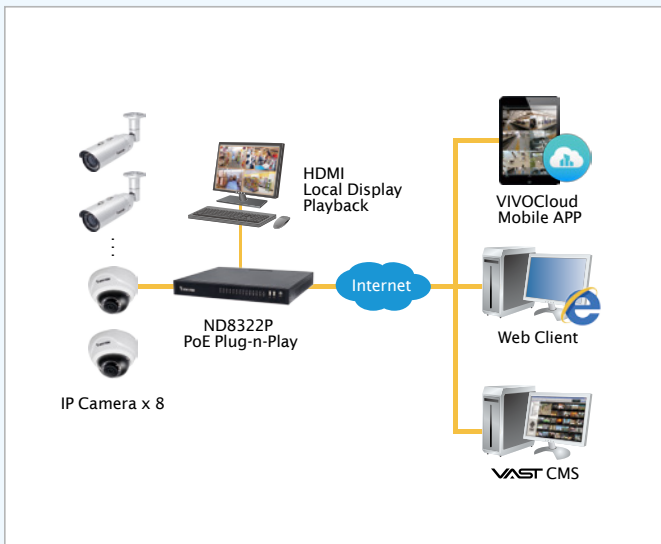
VIVOTEK ND8322P is a Linux embedded 8-CH standalone NVR with 8-port 802.3af Compliant PoE, allowing connection with PoE cameras for a max. 80 W power supply. ND8322P also features "One Button Setup" with its plug-&-play and auto-setup functionality, making this advanced unit surprisingly simple to install, and suitable for any small-scale video surveillance applications.

Supporting HDMI and VGA local video output, users can control the GUI OSD interface via mouse & keyboard, eliminating the need for a separate PC to search video or to playback from the NVR. The new local display design - Auto Adaptive Stream will dynamically modify Stream 2 resolution of a camera to best fit the display resolution according to the layout type, resulting in an efficient display, while maintaining superb image quality. Further, the RAID 0/1 configuration provides further data security in the rare event of a hard drive failure. Meanwhile, ND8322P supports software fisheye camera de-warping function, providing right angle of video view and detailed information for usage. What's more, ND8322P, featuring various I/O ports, such as eSATA port, alarm input/output, RS232, and RS485 provides users great flexibility of applications.

With VAST CMS, users can set up IP surveillance system with ease. For remote and mobile access, VIVOTEK also provides VIVOCloud and iViewer app, for both iOS and Android handheld devices, enabling users to monitor live video anytime, anywhere.

Key Features

- Plug & Play One Button Auto Setup
- VIVOCloud by Scanning QR Code for 24/7 Mobile Viewing
- Intuitive, Elegant Interaction UI
- 8x 802.3af Compliant PoE Ports
- VIVOTEK Camera Configuration and VAST CMS Integrated
- Live and Playback Fisheye Dewarp
- Embedded Linux OS
- e-SATA for Extension Storage
- Support RAID 0/1 Storage
- Story Board Event Search
- ONVIF Open Platform
- Fanless Design
- Up to 12MP Camera Liveview & Playback (FE series)
- POS Integration (Project Support Function)
- Watermark



ND8322P Application Scenario



Convenience Store



Restaurant



Clothing Specialty



Electronics Specialty

Hardware Information

Model	ND8322P
System	
OS	Embedded Linux
CPU	ARM Processor
Flash	256 MB
RAM	1 GB
Watchdog	Hardware + Software
Power Restoration	System Restart Automatically after Power Recovery
Storage	
HDD Devices	Internal x2
HDD Max. Capacity	8 TB x2
Disk Management	Create, Format and Remove Disk HDD S.M.A.R.T RAID 0, 1
Video	
Video Output	HDMI x1, VGA x1
Resolution	1920x1080, 1280x720
Graphics Decoder	Hardware decoding H.264: 2560x1920 @ 30 fps (1-CH) 1920x1080 @ 120 fps (4-CH) 1280x720 @ 240 fps (8-CH)
Decoding Capacity	
Camera Position	Change the viewcell position on the Live View screens
External Interface	
USB Interface	Front: 2 (USB 2.0) Back: 1 (USB 2.0)
Alarm In	8
Alarm Out	4
Audio	3.5 Phone Jack Audio Output x1 3.5 Phone Jack Audio Input (Reserved) x1
External HDD	eSATA Port x1
RS232	1 Port (Reserved)
RS485	1 Port (Reserved)
Network	
Network Interface	10/100/1000Mbps Ethernet (RJ-45) x1 *It is highly recommended to use standard Cat. 5e & Cat. 6 cables which are compliant with the 3P/ETL standard.

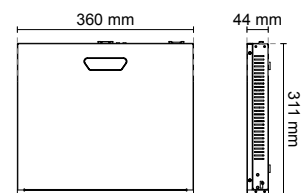
PoE	8x 802.3af Compliant PoE Ports (Total Max. 80W)
Protocols	IPv4, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, SMTP, FTP, DHCP, NTP, DNS, DDNS, IP Filter
Power	
Power Input	DC 56V 2.32A
Power Consumption	Max. 120 W
LED Indicator	
LED Indicator	Power, Status, Record, HDD1, HDD2, eSATA, Ethernet, Port 1 ~ Port 8
Mechanic	
Form Factor	Desktop
Operation Buttons	Power (Front) / Reset (Back)
Dimensions	360 (W) x 311 (D) x 44 (H) mm
Weight	2.7 kg (without HDD)
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)
Humidity	0 ~ 95%
General	
Safety Certifications	CE, LVD, FCC, VCCI, C-Tick, UL
Warranty	24 months
Client PC Requirements	
Operating System	Microsoft Windows OS: XP/Vista/7/8/2008/2012
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, ST7501, Shepherd, VAST, VAST2
Mobile/Tablet App	VIVOCLOUD (iOS/Android), iViewer (iOS/Android)
Accessories	
CD	User's Manual, Quick Installation Guide (QIG), Installation Wizard 2
Others	Power Adapter, Power Cord, Quick Installation Guide, 16 x H.D.D. Screws, 4 x H.D.D. Brackets, 1 x USB Mouse, 2 x SATA Cables

Software Information

Record	
Maximum Channel	8
Record Throughput (MB)	64 Mbps
Network Throughput (MB)	24 Mbps
Audio Format	G.711, G.726
Video Format	MJPEG, H.264
Video Resolution	VGA, 1MP, 2MP, 3MP, 5MP & 12MP (FE series) Camera
Array Type	RAID 0, 1
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
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: 10, 1P, 1R, 1O3R, 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, and 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 (10, 1P, 1R, 1O3R, 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 (10, 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 (10, 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, Camera Network Loss, DI, DO
Action	Record, Email (Text), Email (Snapshot), FTP, Buzzer, PTZ Control (Go to Preset), NVR DO, Camera DO, VIVOCLOUD APP Notification
Recording Time (sec.)	Pre-Record: 5 (Max. 10), Post-Record: 20 (Max. 300)
Backup	
Manual	USB Dongle (FAT Format)
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, Polish, Portuguese, Russian, Spanish, Simplified Chinese, Traditional Chinese
Camera Integration	
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 the other brand camera through "Insert Camera & Batch Insert"
Device Integration	
UPS	APC Model Compatible
Joystick	IPD-USB, AJ-001

Dimensions





FD8169A

Fixed Dome Network Camera



2MP · 20M IR · Smart Stream II · SNV · Defog · VIVOCLOUD

VIVOTEK's FD8169A is an easy-to-use fixed dome network camera specifically designed for indoor security applications, with a 2MP sensor enabling a viewing resolution of 1920x1080 at a smooth 30 fps. Dynamic and highly adaptable, the FD8169A is an all-in-one camera capable of capturing high quality video at high resolutions of up to 2 Megapixels.

The FD8169A features VIVOTEK's sophisticated Smart Stream II technology, allowing the camera to optimize image quality for desired regions, and thus ensure maximum efficiency of bandwidth usage and savings of up to 50% on bandwidth and storage requirements.

What's more, in order to adapt to constantly changing lighting conditions, the FD8169A features a removable IR-cut filter as well as IR illuminators effective up to 20M for superior image quality around the clock. Incorporating a number of advanced features standard for VIVOTEK cameras, including video rotation, defog, a dedicated MicroSD/SDHC/SDXC card slot, and VIVOTEK's 32-channel recording software, the FD8169A is the ideal solution for your indoor surveillance needs.

Key Features

- 2-Megapixel CMOS Sensor
- 30 fps @ 1920x1080
- Real-time H.264, MJPEG Compression (Dual Codec)
- Removable IR-cut Filter for Day & Night Function
- Built-in IR Illuminators, Effective up to 20 Meters
- Built-in 802.3af Compliant PoE
- Built-in MicroSD/SDHC/SDXC Card Slot for On-board Storage
- Supports ONVIF Standard to Simplify Integration and Enhance Interoperability
- SNV (Supreme Night Visibility) for Low Light Conditions
- Smart Stream II to Optimize Bandwidth Efficiency
- 3D Noise Reduction
- Smart IR Technology to Avoid Overexposure
- VIVOCLOUD Mobile App



Without Smart Stream II

With Smart Stream II



Library



Hotel

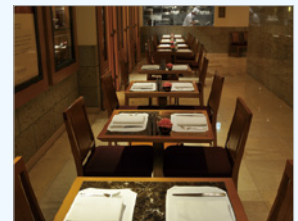


Ordinary Camera

VIVOTEK SNV Camera

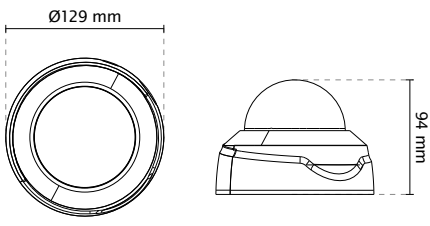


Retail



Restaurant

Technical Specifications

Model	FD8169A	ONVIF	Supported, specification available at www.onvif.org
System Information		Intelligent Video	
CPU	Multimedia SoC (System-on-Chip)	Video Motion Detection	Five-window video motion detection
Flash	128MB	Alarm and Event	
RAM	256MB	Alarm Triggers	Motion detection, manual trigger, periodical trigger, system boot, recording notification, camera tampering detection
Camera Features		Alarm Events	Event notification using HTTP, SMTP, FTP, NAS server and MicroSD card File upload via HTTP, SMTP, FTP, NAS server and MicroSD card
Image Sensor	1/2.9 Progressive CMOS	General	
Maximum Resolution	1920x1080 (2MP)	Connectors	RJ-45 for Network/PoE connection
Lens Type	Fixed-focal	LED Indicator	System power and status indicator
Focal Length	f = 2.8 mm	Power Input	IEEE 802.3af PoE Class 0
Aperture	F1.8	Power Consumption	Max: 8.5 W
Field of View	114° (Horizontal) 61° (Vertical) 132° (Diagonal)	Dimensions	Ø: 129 mm x 94 mm
Shutter Time	1/5 sec. to 1/32,000 sec.	Weight	Net: 416.4 g
WDR Technology	WDR Enhanced	Safety Certifications	CE, LVD, FCC Class B, VCCI, C-Tick, UL
Day/Night	Removable IR-cut filter for day & night function	Operating Temperature	Starting Temperature: 0°C ~ 50°C (32°F ~ 122°F) Working Temperature: -10°C ~ 50°C (14°F ~ 122°F)
Minimum Illumination	0.06 Lux @ F1.8 (Color) 0.01 Lux @ F1.8 (B/W)	Humidity	90%
Pan/Tilt/Zoom Functionalities	ePTZ: 48x digital zoom (4x on IE plug-in, 12x built-in)	Warranty	24 months
IR Illuminators	Built-in IR illuminators, effective up to 20 meters with Smart IR IR LED*8	System Requirements	
On-board Storage	Slot type: MicroSD/SDHC/SDXC card slot Seamless Recording	Operating System	Microsoft Windows 8/7
Video		Web Browser	Internet Explorer 10/11 Chrome version 58.0.3029 or above
Compression	H.264 & MJPEG	Other Players	VLC: 1.1.11 or above QuickTime: 7 or above
Maximum Frame Rate	30 fps @ 1920x1080 In both compression modes	Included Accessories	
Maximum Streams	4 simultaneous streams	Others	Quick installation guide, alignment sticker, screw pack
S/N Ratio	68.5 dB	Dimensions	
Dynamic Range	69.4 dB		
Video Streaming	Adjustable resolution, quality and bitrate Smart Stream II		
Image Settings	Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks Scheduled profile settings, 3D noise reduction, video rotation, defog		
Network			
Users	Live viewing for up to 10 clients		
Protocols	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, CIFS/SMB		
Interface	10 Base-T/100 BaseTX Ethernet (RJ-45) *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.		

Compatible Accessories

Mounting Kits



AM-21A
L-shape Bracket



AM-528
Mounting Adapter



AM-51D
Adapter Ring

Cloud-based Solution

