



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

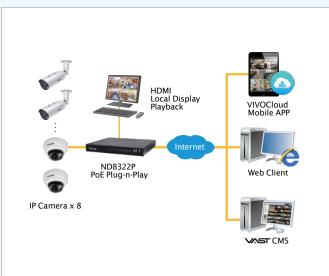
VIVOTEK ND8322P is a Linux embedded 8-CH standalone NVR with 8-port 802.3af Compliant PoE, allowing connection with PoE cameras for a max. 80 W power supply. ND8322P also features "One Button Setup" with its plug&-play and auto-setup functionality, making this advanced unit surprisingly simple to install, 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
- \cdot Intuitive, Elegant Interaction UI
- \cdot 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
- $\cdot \ \text{Fanless Design}$
- · Up to 12MP Camera Liveview & Playback (FE series)
- · POS Integration (Project Support Function)
- · Watermark



ND8322P Application Scenario



Convenience Store



Clothing Specialty



Restaurant



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	1920×1080, 1280×720
Graphics Decoder	Hardware decoding
Decording Capacity	H.264: 2560x1920 @ 30 fps (1-CH) 1920x1080 @ 120 fps (4-CH) 1280x720 @ 240 fps (8-CH)
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.

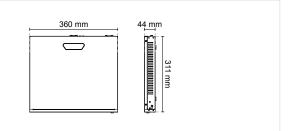
PoE	8x 802.3af Compliant PoE Ports (Total Max. 80W)
Protocols	IPv4, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, SMTP, FTP, DHCP, NTP, DNS, DDNS, IP Filter
Power	
Power Input	DC 56V 2.32A
Power Consumption	Max. 120 W
LED Indicator	
LED Indicator	Power, Status, Record, HDD1, HDD2, eSATA, Ethernet, Port 1 ~ Port 8
Mechanic	
Form Factor	Desktop
Opateration 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
Ethenet	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 Throughput (MB) Record Throughput (MB) Audio Format G. 711, G. 726 Video Format Video Format Video Resolution VGA, 1MP, 2MP, 3MP, 5MP & 12MP (FE series) Camera Array Type RAID 0, 1 Recording Time (sec.) Recording Stream Recording Stream Recording Mode Recording Mode Recording Stetting Recording Bath Recording Bath Recording Path Recording Path Recording Path Recording Path Recording Path Record MyEve (Local Display) Stream Application PTZ Control Payback Control Playback Control Playback Centrol Snapshot Video Stream Sream Application Stream Selection One Way LiveView (Bemote) FIZ Control PTZ Control PTZ Control PTZ Control Stream Selection One Way Stream Selection Monitor Enhancement Stream Application Stream Selection One Way LiveView (Bemote) Stream Selection One Way LiveView (Display Multi Layout Display: 1x1, 2x2, 1y4-3, 1M+5, 1M+5 Stream Application Stream Selection One Way LiveView (Display Multi Layout Display: 1x1, 2x2, 3x3, 1V+3, 1M+5 Stream Selection One Way LiveView Display Multi Layout Display: 1x1, 2x2, 3x3, 1V+3, 1M+5 Stream Selection One Way S	Record	
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Calendar, Timeline, Timeline Scale, Bookmark Monitor Enhancement OSD Display (NVR), Drag & Drop, Audio Control, PiP Control,	Playback Display	
	Playback Control	
	Monitor Enhancement	

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, 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









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

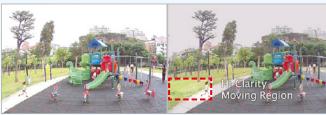
VIVOTEK's FD8169A is an easy-to-use fixed dome network camera specifically designed for indoor security applications, with a 2MP sensor enabling a viewing resolution of 1920x1080 at a smooth 30 fps. Dynamic and highly adaptable, the FD8169A is an all-in-one camera capable of capturing high quality video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

Ordinary Camera



VIVOTEK SNV Camera



Library







Retail

Restaurant

Technical Specifications FD8169A ONVIE Supported, specification available at www.onvif.org Model System Information Intelligent Video Video Motion Detection Five-window video motion detection CPU Multimedia SoC (System-on-Chip) Flash 128MB Alarm and Event RAM 256MB Motion detection, manual trigger, periodical trigger, system boot, recording notification, camera tampering detection **Alarm Triggers Camera Features** 1/2.9 Progressive CMOS Event notification using HTTP, SMTP, FTP, NAS server and MicroSD card Image Sensor Alarm Events Maximum Resolution 1920x1080 (2MP) File upload via HTTP, SMTP, FTP, NAS server and MicroSD card Fixed-focal Lens Type General Focal Length f = 2.8 mmConnectors RJ-45 for Network/PoE connection F1.8 Aperture **LED Indicator** System power and status indicator 114° (Horizontal) Field of View 61° (Vertical) IEEE 802.3af PoE Class 0 **Power Input** 132° (Diagonal) **Power Consumption** Max: 8.5 W 1/5 sec. to 1/32,000 sec. Shutter Time Dimensions Ø: 129 mm x 94 mm **WDR Technology WDR** Enhanced Net: 416.4 a Weight Day/Night Removable IR-cut filter for day & night function Safety Certifications CE, LVD, FCC Class B, VCCI, C-Tick, UL 0.06 Lux @ F1.8 (Color) Minimum Illumination 0.01 Lux @ F1.8 (B/W) Starting Temperature: $0^{\circ}C \sim 50^{\circ}C (32^{\circ}F \sim 122^{\circ}F)$ Working Temperature: $-10^{\circ}C \sim 50^{\circ}C (14^{\circ}F \sim 122^{\circ}F)$ Operating Temperature Pan/Tilt/Zoom Functionalities 48x digital zoom (4x on IE plug-in, 12x built-in) Humidity Built-in IR illuminators, effective up to 20 meters Warranty 24 months IR Illuminators with Smart IR IR LED*8 **System Requirements** Slot type: MicroSD/SDHC/SDXC card slot Operating System Microsoft Windows 8/7 On-board Storage Seamless Recording Internet Explorer 10/11 Web Browser Video Chrome version 58.0.3029 or above Compression H.264 & MIPEG VLC: 1.1.11 or above Other Players OuickTime: 7 or above 30 fps @ 1920x1080 Maximum Frame Rate In both compression modes **Included Accessories** Maximum Streams 4 simultaneous streams Quick installation guide, alignment sticker, screw Others S/N Ratio 68.5 dB 69.4 dB Dynamic Range Adjustable resolution, quality and bitrate Smart Stream II Video Streaming Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, **Dimensions** sharpness, white balance, exposure control, gain, backlight compensation, privacy masks Image Settings Scheduled profile settings, 3D noise reduction, video rotation, defog Ø129 mm Network Users Live viewing for up to 10 clients 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, 94 **Protocols** 10 Base-T/100 BaseTX Ethernet (RJ-45) *It is highly recommended to use standard CAT5e

Compatible Accessories

Mounting Kits

Interface



AM-21A L-shape Bracket



standard.

AM-528 Mounting Adapter

& CAT6 cables which are compliant with the 3P/ETL



AM-51D Adapter Ring

Cloud-based Solution



VIVOTEK INC.

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