

# ND8322P

## 8-CH Embedded Plug & Play NVR



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

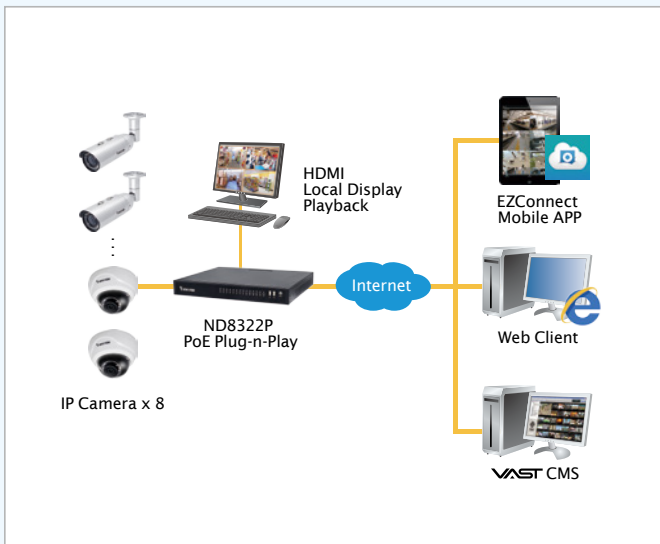
VIVOTEK ND8322P is a Linux embedded 8-CH standalone NVR with 8-port 802.3af Compliant PoE, allowing connection with PoE cameras for a max. 80 W power supply. ND8322P also features "One Button Setup" with its plug-&-play and auto-setup functionality, making this advanced unit surprisingly simple to install,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



ND8322P Application Scenario



Convenience Store



Restaurant



Clothing Specialty



Electronics Specialty

## Hardware Information

|                           |  |
|---------------------------|--|
| Model                     | ND8322P  |
| <b>System</b>             |  |
| OS                        | Embedded Linux   |
| CPU                       | ARM Processor  |
| Flash                     | 256 MB   |
| RAM                       | 1 GB   |
| Watchdog                  | Hardware + Software  |
| Power Restoration         | System Restart Automatically after Power Recovery  |
| <b>Storage</b>            |  |
| HDD Devices               | Internal x2  |
| HDD Max. Capacity         | 8 TB x2  |
| Disk Management           | Create, Format and Remove Disk<br>HDD S.M.A.R.T  |
| <b>Video</b>              |  |
| Video Output              | HDMI x1, VGA x1  |
| Resolution                | 1920x1080, 1280x720  |
| Graphics Decoder          | Hardware decoding<br>H.264:<br>2560x1920 @ 30 fps (1-CH)<br>1920x1080 @ 120 fps (4-CH)<br>1280x720 @ 240 fps (8-CH)                                    |
| Decoding Capacity         |  |
| Camera Position           | Change the viewcell position on the Live View screens  |
| <b>External Interface</b> |  |
| USB Interface             | Front: 2 (USB 2.0)<br>Back: 1 (USB 2.0)  |
| Alarm In                  | 8  |
| Alarm Out                 | 4  |
| Audio                     | 3.5 Phone Jack Audio Output x1<br>3.5 Phone Jack Audio Input (Reserved) x1   |
| External HDD              | eSATA Port x1  |
| RS232                     | 1 Port (Reserved)  |
| RS485                     | 1 Port (Reserved)  |
| <b>Network</b>            |  |
| Network Interface         | 10/100/1000Mbps Ethernet (RJ-45) x1<br>*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                                   |
| <b>Power</b>                  |  |
| Power Input                   | DC 56V 2.32A   |
| Power Consumption             | Max. 120 W   |
| <b>LED Indicator</b>          |  |
| LED Indicator                 | Power, Status, Record, HDD1, HDD2, eSATA, Ethernet, Port 1 ~ Port 8  |
| <b>Mechanic</b>               |  |
| 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%  |
| <b>General</b>                |  |
| Safety Certifications         | CE, LVD, FCC, VCCI, C-Tick, UL   |
| Warranty                      | 24 months  |
| <b>Client PC Requirements</b> |  |
| 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, VAST  |
| Mobile/Tablet App             | EZConnect (iOS/Android), iViewer (iOS/Android)   |
| <b>Accessories</b>            |  |
| 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

|                                 |  |
|---------------------------------|--|
| <b>Record</b>                   |  |
| 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 Camera  |
| Array Type                      | RAID 0, 1  |
| Recording Time (sec.)           | Pre-Record: 5 (Max. 10)<br>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  |
| <b>LiveView (Local Display)</b> |  |
| Stream Application              | Auto Adaptive Stream   |
| LiveView Display                | 8 Channels<br>Multi Layout display:<br>1x1, 1x3 (Corridor View), 2x2, 3x3, 1+5, 1+3, 1+1+3 (1P), 1+3+3 (1P)  |
| Monitor Enhancement             | OSD Display (NVR), OSD Display (Camera), Camera Information, Remote I/O Control, Event Notification, Aspect Ratio<br>Fisheye Dewarp: 10, 1P, 1R, 1O3R, 1O8R                                |
| PTZ Control                     | Panel Control  |
| PTZ Operation                   | Direction Control, Home, Iris, Preset, Patrol (Group), PIP Control   |
| <b>Playback (Local Display)</b> |  |
| Playback Display                | 4 Channels<br>Multiple Layout Display: 2x2<br>Regular (Play, Pause, Stop), Rewind, Next / Previous Frame, Speed Control, Calendar, Event, Timeline, Timeline Scale, Thumbnail (Storyboard) |
| Playback Control                |  |
| 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)   |
| Snapshot                        | JPEG   |
| Video Clip Export               | EXE  |
| <b>LiveView (Remote)</b>        |  |
| Stream Application              | Stream Selection   |
| Audio Capability                | One Way  |
| LiveView Display                | 8 Channels<br>Multi Layout display: 1x1, 2x2, 3x3, 1+3, 1+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   |
| <b>Playback (Remote)</b>        |  |
| Playback Display                | 4 Channels<br>Multi Layout Display: 1x1, 2x2, 1+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   |
| <b>Alarm Management</b>        |   |
| 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  |
| Recording Time (sec.)          | Pre-Record: 5 (Max. 10), Post-Record: 20 (Max. 300)   |
| <b>Backup</b>                  |   |
| Manual                         | USB Dongle (FAT Format)   |
| <b>System</b>                  |   |
| User Management                | User Account: 16<br>User Account Time Limit: 10 mins<br>User Level: Administrator / Regular User<br>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  |
| <b>Camera Intergration</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, MPEG4 & MJPEG)  |
| ONVIF Recording                | Continuous, Schedule, Manual  |
| ONVIF Discover                 | Discover the other brand camera through "Insert Camera & Batch Insert"  |
| <b>Device Intergration</b>     |   |
| UPS                            | APC Model Compatible  |

## Dimensions

