



# ND9441P

H.265 16-CH Embedded PoE NVR

H.265/H.264 • 4K Display • 16x PoE Port • 4x HDD • PoE Management • RAID •  
Fisheye Dewarp • Cybersecurity • Web Plugin Free

- H.265/H.264 Compression Technology
- 4K Display for Clear Monitoring
- Up to 1080p 16CH Decoding Ability
- Smart Search II
- Smart VCA Event Search
- Cybersecurity Management
- Trend Micro IoT Security
- 802.3at/af Compliant PoE port x 16
- PoE Management
- RAID 0, 1, 5 Supported to Prevent from Recording Data Loss
- Multiple Browsers Supported: IE, Chrome and Firefox on both Windows & macOS
- Supports VCA Counting Solution



# Technical Specifications

## Device

|                   |   |
|-------------------|---|
| Model             | ND9441P   |
| OS                | Embedded Linux                                    |
| CPU               | ARM Processor                                     |
| Flash             | 256 MB  |
| RAM               | 2 GB  |
| Watchdog          | Hardware + Software                               |
| Power Restoration | System Restart Automatically after Power Recovery |

## Local Display

|                     |   |
|---------------------|---|
| LiveView Display    | 16 Channels<br>Multi-Layout Display: 1x1, 2x2, 3x3, 1P+3, 2P+3, 1M+5, 1P+6, 3V, 1M+12, 4x4                        |
| Video Output        | HDMI x1, VGA x1   |
| Display Resolution  | 3840x2160, 1920x1080, 1280x720  |
| Camera Position     | Change the viewcell position on the Live View screens   |
| Stream Application  | Constant\Auto Adaptive Stream   |
| Monitor Enhancement | OSD display (NVR), OSD display (camera), camera information, remote I/O control, event notification, aspect ratio |
| Fisheye Dewarp      | 1O, 1P, 1R, 1O3R, 1O8R  |
| PTZ Operation       | Direction Control, Home, Iris, Preset, Patrol (Group), PiP Control  |

## Video

|                     |   |
|---------------------|---|
| Video Format        | H.265, H.264, MJPEG   |
| Graphic Decoder     | Hardware decoding   |
| Decoding Resolution | Up to 4096x4096 (H.265)<br>8192x8192 (H.264)                              |
| Decoding Capability | H.265/H.264:<br>3840x2160 @ 120 fps (4-CH)<br>1920x1080 @ 480 fps (16-CH) |

## Audio

|              |  |
|--------------|--|
| Audio Format | G.711, G.726   |
| Audio In/Out | 3.5 Phone jack audio output x1<br>3.5 Phone jack audio input (reserved) x1 |

## Record

|                       |  |
|-----------------------|--|
| Recording Time (sec.) | Pre-Record: 5 (Max. 10)<br>Post-Record: 20 (Max. 300)            |
| Recording Stream      | Single   |
| Recording Throughput  | 192 Mbps   |
| Recording Mode        | Continuous, Schedule, Manual, Event, Activity Adaptive Streaming |
| Recording Setting     | Recycle (unit: Day)  |
| Watermark             | Supported  |

## Storage & Backup

|                   |   |
|-------------------|---|
| HDD Devices       | Internal x4 (3.5")<br>*HDD is purchased by separately.          |
| HDD Max. Capacity | *Please refer to the HDD supported list on the VIVOTEK website. |
| RAID              | RAID 0, 1, 5 (single volume up to 16TB)                         |
| Disk Management   | Create, Format and Remove Disk<br>HDD S.M.A.R.T.                |
| External Storage  | USB Storage (USB 3.0)   |
| Video Clip Export | USB Dongle (FAT Format)   |
| Schedule Backup   | FTP   |

## Playback

|                                 |  |
|---------------------------------|--|
| Playback Display                | 4 Channels<br>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)  |
| Snapshot                        | JPEG   |
| Video Clip Export               | EXE  |

## Network

|                                    |  |
|------------------------------------|--|
| Ethernet                           | 10/100/1000Mbps Ethernet (RJ-45) x2  |
| Video Throughput for Remote Client | 96 Mbps  |
| PoE                                | 802.3at/af Compliant PoE Ports x 16 (Total Max. 160 W)<br>* DO NOT suggest connecting any non-PD device with this NVR PoE port in order to avoid potential risk. |
| PoE Management                     | Supported  |
| Protocols                          | IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, SMTP, FTP, DHCP, NTP, DNS, DDNS, IP Filter   |

## External Interface

|           |  |
|-----------|--|
| USB       | Front: 2 (USB 2.0)<br>Back: 1 (USB 3.0)                                    |
| Alarm In  | 8  |
| Alarm Out | 4  |
| Audio     | 3.5 Phone Jack Audio Output x1<br>3.5 Phone Jack Audio Input (Reserved) x1 |
| RS485     | 1 Port (Reserved)  |

## System

|                    |  |
|--------------------|--|
| POS Integration    | Supported (by project request)   |
| UPS Integration    | Supported (by project request)   |
| Camera Integration | ONVIF Profile S  |
| Event              | Motion Detection, Smart VCA Event, Cyber Attack, PIR Detection, Tampering Detection, Camera DI/DO, Camera Disconnected, Disk Failure, Disk Full, NVR DI/DO |
| Event Action       | Record, Email (Text), Email (Snapshot), FTP, Buzzer, ePTZ Control (Go to Preset), NVR DO, Camera DO, VIVOCLOUD APP Notification                            |
| User Management    | User level: administrator, regular user  |
| Log                | System, recording, user, error   |
| Date & Time        | Time Zone, Manual, Automatic Sync NTP, Daylight Saving Time  |
| Language           | Czech, English, French, German, Italian, Japanese, Korean, Portuguese, Polish, Russian, Spanish, Simplified Chinese, Traditional Chinese                   |

## Advanced Features


|                          |           |
|--------------------------|-----------|
| VCA Counting Solution    | Supported |
| VCA Event Search         | Supported |
| Smart Search II          | Supported |
| Trend Micro IoT Security | Supported |
| Cybersecurity Management | Supported |

## Remote Client

|                   |  |
|-------------------|--|
| Software AP       | Shepherd, VAST 2   |
| Mobile/Tablet App | iViewer (Android & iOS)  |
| Web Browser       | Internet Explorer 10 (32 bit) or above/ Windows<br>Chrome v68.0.3 & Firefox v61.02 or above/ Windows & macOS |
| VIVOCLOUD         | Supported  |

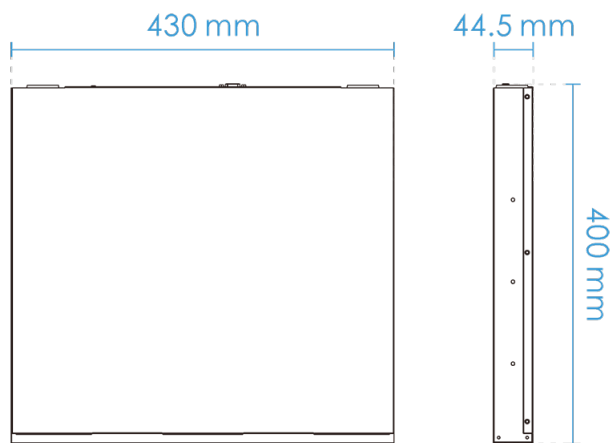
## General

|             |                      |
|-------------|----------------------|
| Power Input | 100-240V AC, 50/60Hz |
|-------------|----------------------|



|                       |                                 |
|-----------------------|---------------------------------|
| Power Consumption     | Max. 260 W                      |
| Dimensions            | 430 (W) x 400 (D) x 44.5 (H) mm |
| Weight                | 4.5 kg (without HDD)            |
| Operating Temperature | 0°C ~ 40°C (32°F ~ 104°F)       |
| Humidity              | 0 ~ 95%                         |
| Safety Certifications | CE, LVD, FCC, VCCI, C-Tick, UL  |
| Warranty              | 24 months                       |

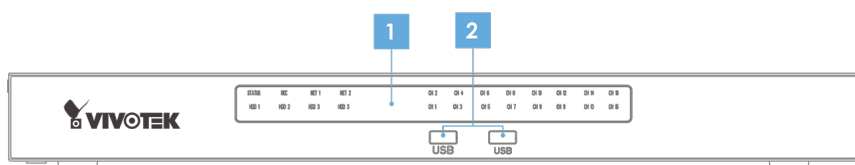
## Dimensions



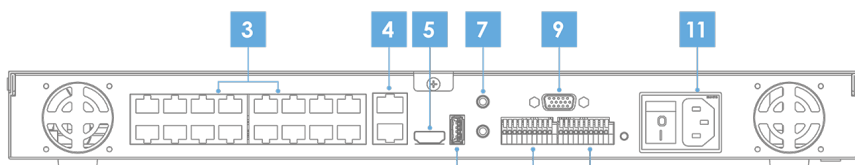
## Ordering Information

| Model   | Description                   | P/N            |
|---------|-------------------------------|----------------|
| ND9441P | H.265, 16CH, 16 PoE, 4HDD NVR | 100150900G, US |
|         |                               | 100150910G, EU |
|         |                               | 100150920G, UK |
|         |                               | 100150930G, AU |

## Mechanical Information



- |                                   |   |
|-----------------------------------|---|
| <b>1</b> LED Indicators           | <b>5</b> HDMI                           |
| <b>2</b> USB 2.0                  | <b>6</b> USB 3.0                        |
| <b>3</b> 16x 802.3at/af PoE Ports | <b>7</b> Audio In/Out                   |
| <b>4</b> 2xGbE Ports              | <b>8</b> 8x Alarm Input 4x Alarm Output |



- |                                |
|--------------------------------|
| <b>9</b> VGA                   |
| <b>10</b> RS485                |
| <b>11</b> 100-240V AC Power In |