



## S Series

# NV9421P

H.265 16-CH Embedded PoE  
Mobile NVR



## Technical Specifications

### Technical Specifications

|              |                                    |
|--------------|------------------------------------|
| Descriptions | 16-CH Embedded PoE Mobile NVR(M12) |
|--------------|------------------------------------|

### Device

|                   |                                                   |
|-------------------|---------------------------------------------------|
| OS                | Embedded Linux                                    |
| Watchdog          | Hardware + Software                               |
| Power Restoration | System Restart Automatically after Power Recovery |

### Display

|                    |                                                                                               |
|--------------------|-----------------------------------------------------------------------------------------------|
| LiveView Display   | 16 Channels<br>Multi-layout display:<br>1x1, 2x2, 3x3, 4x4, 1M+5, 1M+12, 1P+3, 1P+6, 2P+3, 3V |
| Video Output       | HDMI x1, VGA x1                                                                               |
| Display Resolution | 3840x2160, 1920x1080, 1280x720                                                                |
| Stream Application | Constant\Auto Adaptive Stream                                                                 |
| Fisheye Dewarp     | Local: 1O, 1P, 1R, 1O3R, 1O8R, 1P3R<br>Web: 1O, 1R, 1P                                        |
| PTZ Operation      | Direction Control, Home, Iris, Preset, Patrol (Group)                                         |

### Video

|                     |                                                                          |
|---------------------|--------------------------------------------------------------------------|
| Video Format        | MJPEG, H.264, H.265                                                      |
| Graphic Decoder     | Hardware decoding                                                        |
| Decoding Resolution | Up to 7680x2560                                                          |
| Decoding Capability | H.265/H.264:<br>3840x2160 @ 90 fps (3-CH)<br>1920x1080 @ 360 fps (12-CH) |

| Audio        |                   |
|--------------|-------------------|
| Audio Format | G.711, G.726, AAC |
| Audio In/Out | Line out x 1      |

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

| Storage & Backup  |                                                                                                                                    |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------|
| DISK Devices      | Up to 2x 2.5" industrial-grade SSDs (Phison MSD260, sold separately) with a cold-swappable storage bay featuring a secure key lock |
| HDD Max. Capacity | Please refer to SSD supported list on VIVOTEK website                                                                              |
| RAID              | RAID 0,1                                                                                                                           |
| Disk Management   | Create, Format and Remove Disk<br>HDD S.M.A.R.T                                                                                    |
| SD Card           | SD card slot x1 (reserved)                                                                                                         |
| 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 x 1                                                               |
| Network Throughput in total | 224 Mbps                                                                                   |
| WiFi                        | 802.11a/b/g/n/ac 2T2R (optional accessory: WNFT-237ACN(BT) module and AMN-W21-02 antenna)  |
| Mobile Network              | LTE (optional accessory: SIM7600G-H-M2 module and AMN-M21-02 antenna)                      |
| PoE                         | 802.3at/af compliant PoE ports x 8 (M12)<br>(Total Max. 64W)                               |
| PoE Management              | Supported                                                                                  |
| Protocols                   | IPv4, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, SMTP, FTP, DHCP, NTP, DNS, DDNS, IP Filter |

| External Interface |                                         |
|--------------------|-----------------------------------------|
| USB                | Front x1 (USB 2.0)<br>Back x1 (USB 2.0) |
| CAN                | Signaling x2 pair in one M12 connector  |
| Alarm In           | x8 (DI: 5V~ 30VDC)                      |
| Alarm Out          | x4 (DO: max. 1A 30VDC or 0.5A 125VAC)   |
| Audio              | Line out x 1                            |
| Antenna Interface  | GNSS x1, WiFi x2, LTE x2 ( Reserved)    |
| RS232              | 1 Port (Reserved)                       |

| System             |                                                                                                                                                                               |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Camera Integration | ONVIF Profile S                                                                                                                                                               |
| GNSS               | GPS/GLONASS, L1 band, 1(default)~10Hz NEMA0183 output rate                                                                                                                    |
| G-sensor           | Support 16-bit resolution, 128 to 1024 samples/sec, range:±2, ±4, ±8, ±12, ±16g                                                                                               |
| Event              | Motion Detection, PIR Detection, Tampering Detection, Camera DI/DO, Camera Disconnected, Disk Failure, Disk Full, NVR DI/DO, GPS disconnected, GPS speed, G-sensor, PoE error |
| Event Action       | Video recording, email with snapshot, buzzer, PTZ, FTP, DO (camera, system), full screen, send to CMS                                                                         |
| 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, Arabic                              |

| Remote Client     |                         |
|-------------------|-------------------------|
| Software AP       | Shepherd , VSS          |
| Mobile/Tablet App | iViewer (Android & iOS) |
| Web Browser       | Chrome                  |

| General               |                                                                                                                      |
|-----------------------|----------------------------------------------------------------------------------------------------------------------|
| Power Input           | DC 12V~48V                                                                                                           |
| Power Management      | Programmable delay on/off relative to ignition or other switched voltage                                             |
| Power Consumption     | max.155W                                                                                                             |
| Dimensions            | 284 (W) x 230 (D) x 90.6 (H) mm                                                                                      |
| Weight                | approx. 4.4 kg (without HDD)                                                                                         |
| Operating Temperature | -40°C ~ 55°C (-40°F ~ 131°F)                                                                                         |
| Humidity              | 0 ~ 95%                                                                                                              |
| Safety Certifications | CE, FCC, VCCI, C-Tick, EN50155(OT2/ST0/nominal 24VDC), EN61373, UL, CB, EN45545, EN50121-3-2/EN50121-4, MIL-STD-810G |