

# WJ-NX310KG

16/24/32ch H.265 NVR

## i-PRO NX series High-secured NVR

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- 16/24/32ch NVR
- Support up to 72 TB HDD
- High security and High connectivity
- NDAA compliant with intel® CPU
- FIPS 140-2 level 3 Certified Secure Element
- Remote Monitoring



# SPECIFICATIONS

| Supported Camera           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compatible Vendor          | Panasonic i-PRO series Network cameras, ONVIF NVT conformant camera and encoder                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Supported Image Format     | H.265(HEVC), H.264, JPEG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Supported Image Resolution | <ul style="list-style-type: none"> <li>•Aspect ratio [4 : 3]<br/>3,072x2,304, 2,560x1,920, 2,048x1,536, 1,600x1,200, 1280x960, 800x600, 640x480</li> <li>•Aspect ratio [16 : 9]<br/>3,840x2,160, 3,328x1,872, 3,072x1,728, 2,688x1,520, 2560x1440, 1920x1080, 1280x720, 640x360</li> <li>•Aspect ratio [1 : 1]<br/>2992x2992, 2816x2816, 2,192x2,192, 2048x2048, 1,440x1,440, 1280x1280, 1,200x1,200</li> <li>•Aspect ratio [9 : 16]<br/>2,160x3,840, 1,872x3,328, 1,728x3,072, 1,520x2,688, 1,440x2,560, 1,080x1,920, 720x1,280, 360x640</li> </ul> |
| Supported Audio Format     | AAC-LC, G.711(for ONVIF)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Maximum Number of Cameras  | Max. 32 (Default number of cameras : 16)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Recording                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Recording Mode             | Event, Schedule, Emergency, Pre-event recording                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Pre-Alarm Recording        | Up to 15 seconds<br>*When the delivery speed from the network camera is less than 4 Mbps                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Sub-Stream Recording       | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Scheduled Recording Mode   | 16 programs, 6 time zones/day,<br>Independent setup for each day of the week                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Frame Rate                 | Up to 60 fps (Depending on the camera)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Main Unit Functions        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Camera Control             | Pan/Tilt, Zoom, Focus, Brightness, Preset position call and program (up to 256), Auto mode, Click centering, Wheel zoom, Zoom reset, Auto Back Focus, Aux, Wiper (for WV-SUD638), Active ClearSight                                                                                                                                                                                                                                                                                                                                                  |
| Multiscreen Mode           | <p>[Main monitor]<br/>Control screen: 4 / 9 / 16 split screen display<br/>Wide view screen: 2 / 3 / 4 / 5 / 6 / 7 / 9 / 12 / 16 / 24 / 32 split screen display,<br/>1 screen sequence, 4 / 9 / 16 split screen sequence</p> <p>[Sub monitor]<br/>1 / 4 / 9 / 16 / 32 split screen display, 1 screen sequence, 4 / 9 / 16 split screen sequence</p>                                                                                                                                                                                                   |
| Playback Control           | PLAY, Rev PLAY, Pause, Stop, FF, FR, Prev Record, Next Record, Prev Image, Next Image, Go to Date, Go to Last (30 s), Time-saving playback                                                                                                                                                                                                                                                                                                                                                                                                           |
| Search Mode                | Search criteria : Time date, Playback by designating a timeline, Thumbnail                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Copy                       | File Format: Original Format / MP4<br>Recorded data of selected cameras and time date range can be copied to USB storage.                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Camera Title               | Up to 16 Characters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Clock Display              | Time : 12H/24H, Date : 5 formats                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Digital Zoom               | Live / Play: 1.25x 1.5x 1.75x, 2x, 2.5x, 3x, 3.5x 4x, 5x, 6x, 7x, 8x (only for 1-screen or 4-screen)                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| System Log                 | Operator access (500), Network error (100), Error (1,000), Event (1000), Operation (500)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| System Setup Language      | Setup page in English, French, Italian, Spanish, German, Portuguese, Thai, Vietnamese, Simplified Chinese, Traditional Chinese, Japanese                                                                                                                                                                                                                                                                                                                                                                                                             |
| 360 Camera Dewarp          | Only 1ch display mode<br>Display : 1-Screen PTZ / 4-Screen PTZ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

|                         |                                                                                                                                 |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Re-Encoding             | 2 clients                                                                                                                       |
| SD Memory Data Download | Images recorded in the SD card in the i-PRO series cameras can be transferred to the recorder automatically. (H.265/H.264)      |
| User Registration       | Up to 32 users                                                                                                                  |
| User Level              | 3 levels (Programmable)                                                                                                         |
| Partitioning            | User level - Camera (View & Control, View Only, No Access)                                                                      |
| Security Method         | User authentication (ID and Password), Host authentication, SSL/TLS, Data encryption (Only when using Secure communication kit) |

### Web Browser

|                  |                                                                                                                                                                                      |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Camera Control   | Pan/Tilt, Zoom, Focus, Brightness, Preset position call and program (up to 256), Auto mode, Click centering, Wheel zoom, Zoom reset, , Aux, Wiper (for WV-SUD638), Active ClearSight |
| Playback Control | PLAY, Rev PLAY, Pause, Stop, FF, FR, Prev Record, Next Record, Prev Image, Next Image, Go to Date, Go to Last                                                                        |
| Search Mode      | Search criteria: Time date, Event type, VMD, Camera number                                                                                                                           |
| Display Mode     | 1 screen                                                                                                                                                                             |
| Image Download   | File Format : Original Format / MP4<br>Recorded data of selected camera and time range can be downloaded to a PC.<br>Viewer software can be downloaded separately                    |
| Camera Title     | Up to 16 characters                                                                                                                                                                  |
| Clock Display    | Time: 12H/24H, Date: 5 formats                                                                                                                                                       |
| Alarm Control    | Reset                                                                                                                                                                                |
| Digital Zoom     | -                                                                                                                                                                                    |
| System Log       | Operator access (500), Network error (100), Error (1,000), Event (1000), Operation (500)                                                                                             |
| GUI Language     | Setup page in English, French, German, Italian, Spanish, Portuguese, Thai, Vietnamese, Simplified Chinese, Traditional Chinese, Japanese                                             |
| Required PC      | CPU: Intel® Core™ i7-860 or faster , RAM : 4 GB or more<br>VRAM: 128 MB or more (Min. 64 MB), Microsoft® DirectX® 9.0c or later                                                      |

### Alarm/Event

|               |                                                                                                             |
|---------------|-------------------------------------------------------------------------------------------------------------|
| Alarm Source  | 9x Terminal inputs, 32x Camera alarms (TCP alarm notification), 128x Command alarms                         |
| Event Mode    | Off / On(Recording & alarm action, Recording only)                                                          |
| Alarm Action  | Alarm recording, E-mail notification, Alarm message, Camera positioning, Terminal output, Buzzer, Indicator |
| Alarm Control | Reset                                                                                                       |
| Event Log     | Up to 1000                                                                                                  |

### Input/Output

|                          |                                                                                                                                                                                                                                                    |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Monitor (HDMI) Connector | [Main monitor]<br>HDMI 4K UHD(3840x2160p)/30Hz, 4K UHD(3840x2160p)/25Hz, 1920x1080p/60Hz, 1920x1080p/50Hz,<br>[Sub monitor]<br>HDMI 4K UHD(3840x2160p)/30Hz, 4K UHD(3840x2160p)/25Hz, 1920x1080p/60Hz, 1920x1080p/50Hz,                            |
| Audio Output Connector   | -                                                                                                                                                                                                                                                  |
| Alarm IO                 | Alarm in: 9<br>Alarm out: 1                                                                                                                                                                                                                        |
| Control IO               | Network error output, Alarm reset input, Emergency recording input<br>External recording mode switching input, HDD error/recording error output<br>Camera error output, Device error output, +5V output (200mA)<br>General purpose input/output x4 |
| Mouse Connection Port    | x1 USB2.0 conformant port in front side<br>DC5V/500mA (with over current limitation function)                                                                                                                                                      |

|                          |                                                                                                                                                                                                                         |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Camera/PC Network Port   | 2x 10BASE-T / 100BASE-TX / 1000BASE-T (RJ45)                                                                                                                                                                            |
| Maintenance Network Port | -                                                                                                                                                                                                                       |
| USB Storage              | Front: USB 3.0/USB 2.0 stick, USB 3.0/USB 2.0 HDD (self-powered device only)<br>Rear: USB 3.0/USB 2.0 stick, USB 3.0/USB 2.0 HDD (self-powered device only), USB 3.0/USB 2.0 SSD (both of self and bus-powered devices) |

### Network

|                           |                                                                                               |
|---------------------------|-----------------------------------------------------------------------------------------------|
| Maximum Recording Rate    | 256 Mbps                                                                                      |
| Maximum Bandwidth         | Total 512 Mbps or less                                                                        |
| Supported Protocol        | IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, SMTP, DNS, NTP, SNMP, RTP, RTSP, ICMP, ARP<br>IPv6: ICMPv6 |
| E-mail                    | Upon Alarm or Warning                                                                         |
| No. of Simultaneous Users | 16 or less                                                                                    |

### Other Functions

|                                        |                                                                                                           |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Time Synchronization                   | NTP (Server/Client)                                                                                       |
| Summer Time                            | User definable (using menu setup)                                                                         |
| Remote Monitoring on Smartphone/Tablet | 1000 cameras or less<br>Allows the PC and mobile APP full access the multiple NU series / NX series NVRs. |

### HDD

|                    |                                                                                                                                                                                                                                                                                                                                     |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HDD                | Not installed, HDD canister: max. 4 slots (3.5")                                                                                                                                                                                                                                                                                    |
| HDD Extension Unit | Cannot be attached                                                                                                                                                                                                                                                                                                                  |
| Maximum Capacity   | Determined on "HDD compatibility chart"<br>max.18TB supported<br><br>For Detail:<br><a href="https://i-pro.com/products_and_solutions/en/surveillance/learning-and-support/knowledge-base/compatibility-chart">https://i-pro.com/products_and_solutions/en/surveillance/learning-and-support/knowledge-base/compatibility-chart</a> |
| RAID               | RAID1 (Software RAID)                                                                                                                                                                                                                                                                                                               |

### Viewer Software

|                      |                                                                                                                               |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Playback Control     | PLAY, Rev PLAY, Pause, FF, FR, Prev Record, Next Record, Prev Image, Next Image                                               |
| Additional Functions | Alteration detection, Save as JPEG, Two times zoom, Print, Copy, Aspect ratio switching, fisheye correction, corridor display |
| Supported Language   | English, Japanese                                                                                                             |

### Extension Software

|                           |                                                     |
|---------------------------|-----------------------------------------------------|
| Camera Extension Kit      | WJ-NXE32W (16ch→24ch→32ch)<br>WJ-NXE33W (16ch→32ch) |
| Business Intelligence Kit | -                                                   |
| Secure Communication Kit  | WJ-NXS01W, WJ-NXS04W,<br>WJ-NXS16W, WJ-NXS32W       |

### General

|                               |                                                            |
|-------------------------------|------------------------------------------------------------|
| Safety/EMC Standard           | DEMKO (IEC62368-1),<br>CE/UKCA (EN55032/EN55035)           |
| Power Source                  | AC100-240V (±10%), 50Hz/60Hz                               |
| Power Consumption             | 95W<br>100VA                                               |
| Ambient Operating Temperature | NVR: 0°C-45°C (32°F-113°F)<br>Mouse: 5°C-40°C (41°F-104°F) |
| Ambient Operating Humidity    | 5 % to 90 % (without condensation)                         |
| Maximum Operating Altitude    | 2,000 m (6,562 feet)                                       |

|                |                                                                                                                                                                         |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimensions     | W420 x H88 x D370 (mm)<br>W16-17/32 x H3-15/32 x D14-9/16 (inches)<br>*350 mm (13-25/32 inches) from rack mount bracket<br>*Does not include rubber feet or protrusions |
| Mass (Approx.) | 7.5 kg {16.56lbs}*<br>*If HDD is not mounted                                                                                                                            |
| Finish         | Front Panel: Plastic, Powder Coating<br>Top Cover: SECC, Powder Coating<br>Rear Panel: SECC                                                                             |

## OPTIONAL ACCESSORIES

Select a compatible accessory

[Accessory Selector \(i-pro.com\)](http://i-pro.com).



WJ-HXE410  
Extension Unit



WJ-HXE400  
Extension Unit

# APPEARANCE

