# i-PRO

# WJ-NX100

# Network Disk Recorder

H.265/H.264 high-throughput featuring integrated GUI and robust embedded IP security enabling a secure end-to-end PC-less surveillance solution for mission-critical applications.
Supports full data encryption streaming recording for all i-PRO cameras which comply to FIPS 140-2 Level 1 standards to keep your video secured from spoofing and snooping activities.

## Built-in PoE and Space saving
- 4 PoE ports ready, no need to prepare a separate switching hub.
- Space saving in a compact size (24% reduction in capacity compared to WJ-NX200)

## Secure communication and high compression recording
- Pre-installed 2.5"HDD 2 TB (Max. 4 TB)
- Significant reduction of storage space usage through H.265 and Smart Coding.
- 4 ch. camera input. Supports H.265 / H.264 mixed recordings
- Pre-installed device certificates *Secure Communication Kits are necessary.

## PC-less non-VMS surveillance solution
- No annual license updates required.
- Built-in GUI and HDMI (4K/FHD) outputs
- Automatic camera configuration
- Image search with thumbnails
- High-speed copy to USB storage

## High efficiency data reading/writing
- ECO-writing: Acceleration of data access (reading/writing) by original file system

HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

ONVIF® | S

H.265
H.264 JPEG

*ONVIF is a trademark of ONVIF, Inc.

# Specifications

| | | |
|---|---|---|
| **Supported Camera** | Compatible vendor | i-PRO series Network cameras, ONVIF NVT conformant camera and encoder |
| | Supported Image Format | H.265(HEVC), H.264, JPEG |
| | Supported Image Resolution (Depending on the camera) | •Aspect ratio [4 : 3]<br>4000x3000, 3072×2304, 2560x1920, 2048x1536, 1280x960, 800x600, 640x480<br>•Aspect ratio [16 : 9]<br>3840x2160, 3072×1728, 2560x1440, 1920x1080, 1280x720, 640x360<br>•Aspect ratio [1 : 1]<br>2992x2992, 2816x2816, 2192x2192, 2048x2048, 1280x1280<br>•Aspect ratio [9 : 16]<br>2160x3840, 1728x3072, 1440x2560, 1080x1920, 720x1280, 360x640 |
| | Supported Audio Format | G.711 for Onvif, G.726 (ADPCM) 32 kbps, AAC-LC |
| | Maximum Number of Cameras | MAX. 4 |
| **Recording** | Recording Mode | Event, Schedule, Emergency |
| | Pre-alarm Recording | Up to 15 seconds  *When the delivery speed from the network camera is less than 4 Mbps. |
| | Sub-stream Recording | 64 / 128 / 256 / 384 / 512 / 768 kbps |
| | Scheduled Recording Mode | 4 programs, 6 time zones/day, Independent setup for each day of the week |
| | Frame Rate/Camera | 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) |
| | Multiscreen Mode | **[Main monitor]**<br>• Control screen     4 split screen display<br>• Wide view screen  2 / 3 / 4 split screen display,1 screen sequence<br>**[Sub monitor]**<br>1 screen sequence, 4 split screen display |
| | 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, VMD, 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 | Setup page in English, French, Italian, Spanish, German, Russian, Portuguese, Thai, Simplified Chinese, Traditional Chinese, Japanese |
| | 360 Camera Dewarp | Only 1ch display mode. |
| | re-encoding | 2Client |
| | 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) |
| **Browser GUI** | 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) |
| | 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) |
| | Search Mode | Search criteria: Time date, Event type, VMD, Camera number |
| | Display Mode | 1 / 4 screen |
| | Image Download | File Format: Original Format / MP4<br>Recorded data of selected camera and time range can be downloaded to a PC. Viewer software can be downloaded separately. |
| | 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 | On the browser. Time: 12H/24H, Date: 5 formats |
| | Alarm Control | Reset |
| | Digital Zoom | Live/Play: 2x, 4x (only for 1-screen) |
| | System Log | Operator access (500), Network error (100), Error (1,000), Event (1000), Operation (500) |
| | GUI Language | Setup page in English, French, Italian, Spanish, German, Russian, Portuguese, Thai, Simplified Chinese, Traditional Chinese, Japanese |
| | Required PC | CPU: Intel® Core™ i7-860 or faster , RAM : 4 GB or more, VRAM: 128 MB or more (Min. 64 MB), Microsoft® DirectX® 9.0c or later |

| | | | |
|---|---|---|---|
| **Alarm/ Event** | Alarm Source | | 2x Terminal inputs, 4x Camera alarms (TCP alarm notification), 128x Command alarms |
| | Event Mode | | Off / On |
| | Alarm Action | | Alarm recording, e-mail notification, Alarm message, Camera positioning, Terminal output, TCP alarm notification output, Buzzer, Indicator |
| | Alarm Control | | Reset |
| | Event log | | 1000 |
| **Input / Output** | Spot Output Connector | | 1x 1 V [p-p] / 75 Ω (BNC) NTSC /PAL (selectable in setup menu) |
| | Monitor (HDMI) Connector | | **[Main monitor]**<br>HDMI 4K UHD(3840x2160p) /30Hz, 4K UHD(3840x2160p) /25Hz, 1920x1080p /60Hz, 1920x1080p /50Hz, 1920x1080i /60Hz, 1920x1080i /50Hz |
| | Alarm / Control Terminal | Alarm | Alarm input 1 - 2*1, Alarm output*2 |
| | | Control | Time adjustment input/output*1, +5 V output*3, Emergency recording input, Face matching output*4 |
| | | Error / Warning | HDD error / Recording error output*2, Camera error output*2 |
| | Mouse Connection Port | | 1 (USB 2.0) |
| | Network Port (PC) | | 10BASE-T / 100BASE-TX / 1000BASE-T (RJ45) |
| | Network Port (Camera) | | 4x 10BASE-T / 100BASE-TX(RJ45), PoE (IEEE802.3af compliant), PoE Budget (61.6W,  4x 15.4W/port) |
| | USB Storage | | USB 3.0 / USB 2.0 memory, USB 3.0 / USB 2.0 connected HDD (except bus powered device) |
| **Network** | Network Interface | | 10BASE-T / 100BASE-TX / 1000BASE-T (RJ45) |
| | Maximum Recording Rate | | 96 Mbps or less |
| | Maximum Band Width | | Total 192 Mbps or less |
| | Supported Protocol | | IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, FTP, SMTP, DNS, NTP, SNMP, RTP, RTSP, ICMP, ARP<br>IPv6: ICMPv6 |
| | E-mail | | Upon Alarm or Warning |
| | No. of Simultaneous Users | | 16 or less |
| | User Registration | | Up to 32 users |
| | User Level | | 3 Levels (Programmable) |
| | Partitioning | | User level - Camera (View & Control, No Access) |
| | Security Method | | User authentication (ID and Password), Host authentication, Alteration detection, SSL/TLS |
| **Other Functions** | Time Synchronization | | Terminal (Slave), NTP (Server/Client) |
| | Summer Time | | User definable (using menu setup) |
| | Remote Monitoring on Smartphone/Tablet | | 16 clients or less *5 |
| **HDD** | Type | | 2.5 inch Serial ATA HDD, Up to 2x HDDs can be installed. |
| | Maximum Capacity | | Up to 4 TB will be supported.*6 (Installed HDD : 2 TB x 1) |
| | RAID | | RAID 1 |
| **Viewer Software** | Playback Control | | PLAY, Rev PLAY, Pause, FF, FR, Prev Record, Next Record, Prev Image, Next Image |
| | Additional Functions | NX Viewer | Alteration detection, Save as JPEG, Two times zoom, Print, Copy, Aspect ratio switching, fish eye correction, corridor display |
| | Supported OS, Language | | Language of the software will be English or Japanese |
| **General Specifications** | Safety / EMC Standard | | cUL (UL62368-1 3Ed), FCC Part15 ClassA<br>CE (EN62368-1, EN55032 ClassB, EN55035) |
| | Power Source | | 100 V AC to 240 V AC 50 Hz/60 Hz (included AC power adapter) |
| | Power Consumption | | DC48 V 1.875 A approx.81.6 W |
| | Ambient Operating Temperature | | Main body : +5 °C to +45 °C (41 °F to 113 °F)<br>Mouse (provided) : +5 °C to +40 °C (41 °F to 104 °F) |
| | Ambient Operating Humidity | | 5 % to 90 % (without condensation) |
| | Maximum Operating Altitude | | 2,000 m (6,562 feet) above sea level |
| | Dimensions | | 280 mm(W) x 44 mm(H) x 212 mm(D)<br>{11-1/32 inches (W) x 1-23/32 inches (H) x 8-11/32 inches (D)} |
| | Mass (approx.) | | When a HDD is installed: 1.9 kg (4.4 lb)<br>When 2 HDD are installed: 2.0 kg (4.6 lb) |

*1 Non-voltage make contact input, +3.3 V pull-up Approx. 23 kΩ
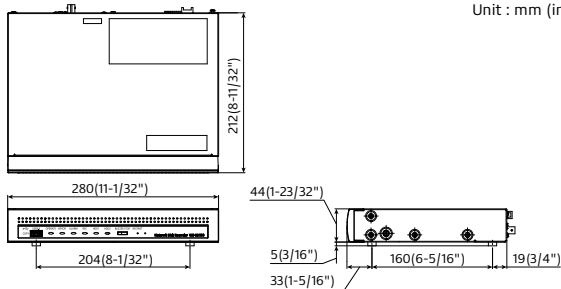*2 Open collector output, 24 V DC, -200 mA max.
*3 +5V ±0.5 V 200 mA max.
*4 Additional Business Intelligence Kit WJ-NXF02W is necessary.
*5 i-PRO Mobile APP is required on smartphone/tablet PC.
*6 Please check the following URL for the latest information. ( https://i-pro.com/global/en/surveillance/training-support/documentation-database-list )

## Appearance

Unit : mm (inches)

212(8-11/32")
280(11-1/32")
204(8-1/32")
44(1-23/32")
5(3/16")   160(6-5/16")   19(3/4")
33(1-5/16")

**Trademarks and registered trademarks**
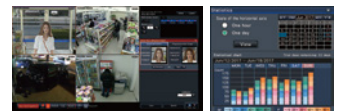– All other trademarks identified herein are the property of their respective owners.
**Important**
– Safety Precautions : Carefully read the Basic Information, Installation Guide and Operating Instructions before using this product.
– i-PRO Co., Ltd. cannot be held responsible for the performance of the network and/or other manufacturers' products used on the network.

## Optional Accessories

**Additional Business Intelligence Kit**
**WJ-NXF02W**
WJ-NXF02W is a license kit intended to improve the usefulness of Network Disk Recorder WJ-NX100. After registering the WJ-NXF02W into WJ-NX100, WJ-NX100 is enabled statistical processing functions such as "People counting" and "Face matching / Age & Gender judgment".  *2ch input per license

**Secure Communication Kits**
The Secure Communication Kits are license kits to use the security function of the network disk recorder.
Each Secure Communication Kit allows the following number of cameras to be registered.

| WJ-NXS01W | WJ-NXS04W |
|---|---|
| 1 camera | 4 cameras |

**WV-Q202**     *When installing WJ-NX100, WV-Q202 is used for vertical installation and wall mounting.
WJ-NX100 cannot be mounted in a rack using WV-Q202.

• Masses and dimensions are approximate.  • Specifications are subject to change without notice.

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https://i-pro.com/
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