

## 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



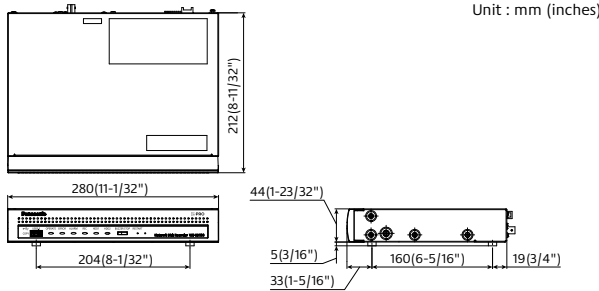
# Specifications

<b>Supported Camera</b>	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 (Depending on the camera)	<b>•Aspect ratio [4 : 3]</b> 4000x3000, 3072x2304, 2560x1920, 2048x1536, 1280x960, 800x600, 640x480 <b>•Aspect ratio [16 : 9]</b> 3840x2160, 3072x1728, 2560x1440, 1920x1080, 1280x720, 640x360 <b>•Aspect ratio [1 : 1]</b> 2992x2992, 2816x2816, 2192x2192, 2048x2048, 1280x1280 <b>•Aspect ratio [9 : 16]</b> 2160x3840, 1728x3072, 1440x2560, 1080x1920, 720x1280, 360x640	
	Supported Audio Format	G.711 for Onvif, G.726 (ADPCM) 32 kbps, AAC-LC	
<b>Recording</b>	Maximum Number of Cameras	MAX. 4	
	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)	
<b>Main Unit Functions</b>	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	<b>[Main monitor]</b> • Control screen 4 split screen display • Wide view screen 2 / 3 / 4 split screen display, 1 screen sequence <b>[Sub monitor]</b> 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 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, 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)	
	<b>Browser GUI</b>	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 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 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, 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	

<b>Alarm/Event</b>	Alarm Source	2x Terminal inputs, 4x Camera alarms (Panasonic Alarm Protocol), 128x Command alarms
	Event Mode	Off / On
	Alarm Action	Alarm recording, e-mail notification, Alarm message, Camera positioning, Terminal output, Panasonic alarm protocol output, Buzzer, Indicator
	Alarm Control	Reset
<b>Input / Output</b>	Event log	1000
	Spot Output Connector	1x 1 V [p-p] / 75 Ω (BNC) NTSC / PAL (selectable in setup menu)
	Monitor (HDMI) Connector	<b>[Main monitor]</b> HDMI 4K UHD(3840x2160p) /30Hz, 4K UHD(3840x2160p) /25Hz, 1920x1080p /60Hz, 1920x1080p /50Hz, 1920x1080i /60Hz, 1920x1080i /50Hz
	Alarm / Control Terminal	Alarm Control Error / Warning
	Alarm input 1 - 2 <sup>1</sup>	Alarm output <sup>2</sup>
	Time adjustment input/output <sup>1</sup> , +5 V output <sup>3</sup> , Emergency recording input, Face matching output <sup>4</sup>	HDD error / Recording error output <sup>2</sup> , Camera error output <sup>2</sup>
	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)
<b>Network</b>	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 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
<b>Other Functions</b>	Time Synchronization	Terminal (Slave), NTP (Server/Client)
	Summer Time	User definable (using menu setup)
	Remote Monitoring on Smartphone/Tablet	16 clients or less <sup>5</sup>
<b>HDD</b>	Type	2.5 inch Serial ATA HDD, Up to 2x HDDs can be installed.
	Maximum Capacity	Up to 4 TB will be supported. <sup>6</sup> (Installed HDD : 2 TB x 1)
	RAID	RAID 1
<b>Viewer Software</b>	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, fish eye correction, corridor display
	Supported OS, Language	Language of the software will be English or Japanese
<b>General Specifications</b>	Safety / EMC Standard	cUL (UL62368-1 3Ed), FCC Part15 ClassA, 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) 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) {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) When 2 HDD are installed: 2.0 kg (4.6 lb)

<sup>1</sup> Non-voltage make contact input, +3.3 V pull-up Approx. 23 kΩ  
<sup>2</sup> Open collector output, 24 V DC, -200 mA max.  
<sup>3</sup> +5V ±0.5 V 200 mA max.  
<sup>4</sup> Additional Business Intelligence Kit WJ-NXF02W is necessary.  
<sup>5</sup> Panasonic Security Viewer v.3.0 or later is required on smartphone/tablet PC.  
<sup>6</sup> Please check the following URL for the latest information. ([https://security.panasonic.com/training\\_support/documentation\\_database/](https://security.panasonic.com/training_support/documentation_database/))

# Appearance



**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.  
 - Panasonic i-PRO Sensing Solutions 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.

<b>WJ-NXS01W</b> 1 camera	<b>WJ-NXS04W</b> 4 cameras
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**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.



Panasonic Corporation

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