

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 Extreme cameras which comply to FIPS 140-2 Level 1 standards to keep your video secured from spoofing and snooping activities.

Secure communication and high compression recording

- Significant reduction of storage space usage through H.265 and Smart Coding.
- 9 ch. expandable to 32 ch. camera input. Supports H.265 / H.264 mixed recordings.
- Symantec device certificates pre-installed *Secure Communication Kits are necessary.

PC-less non-VMS surveillance solution

- No camera license fees with a default number of cameras; no annual license updates required.
- Built-in GUI and Dual HDMI (4K/FHD) outputs
- Automatic camera configuration
- Time-saving playback: High-speed(Max. 4x*) all frames playback when there is no motion; normal-speed playback when there is motion.
*It depends on resolution and number of screens.
- Image search with thumbnails
- High-speed copy to USB storage

High reliability and high efficiency data reading/writing

- Eco-writing: Acceleration of data access (reading/writing) by original file system
- Instantaneous power failure measures: Normal operation at instantaneous power failure within 200 ms; safe shutdown at power failure of 200 ms or more.

Applications

- Banks
- Retail / Quick-Service Restaurants
- Hospitals / Education
- Factories
- Gas Stations



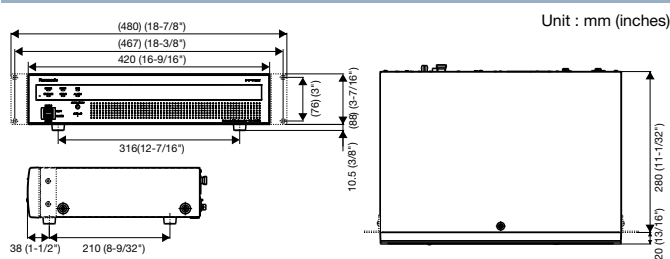
Specifications

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 (Depending on the camera)	• Aspect ratio [4 : 3] 4000x3000, 2560x1920, 2048x1536, 1280x960, 800x600, 640x480 • Aspect ratio [16 : 9] 3840x2160, 2560x1440, 1920x1080, 1280x720, 640x360 • Aspect ratio [1 : 1] 2992x2992, 2816x2816, 2048x2048, 1280x1280 • Aspect ratio [9 : 16] 1080x1920, 720x1280, 360x640
	Supported Audio Format	G.711 for Onvif, G.726 (ADPCM) 32 kbps, AAC-LC
Recording	Maximum Number of Cameras	MAX. 32 ¹⁾ (Default number of cameras : 9)
	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
Main Unit Functions	Scheduled Recording Mode	16 programs, 6 time zones/day, Independent setup for each day of the week
	Frame Rate/Camera	Up to 60 fps (Depending on the camera)
	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] • Control screen 4 / 9 / 16 split screen display • Wide view screen 2 / 3 / 4 / 5 / 6 / 7 / 9 / 12 / 16 / 24 / 32 split screen display, 1 screen sequence, 4 / 9 / 16 split screen sequence • [Sub monitor] 1 / 4 / 9 / 16 / 24 / 32 split screen display, 1 screen sequence, 4 / 9 / 16 split screen sequence
Playback Control	Search Mode	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 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
System Log	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 re-encoding	SD Memory Data Download	Only 1ch display mode. 2Client Images recorded in the SD card in the i-PRO series cameras can be transferred to the recorder automatically. (H.265/H.264)
	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
Browser GUI	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
Alarm Control	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	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

Alarm/Event	Alarm Source	9x Terminal inputs, 32x 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
Input / Output	Event log	1000
	Spot Output Connector	1 x 1 V [p-p] / 75 Ω (BNC) NTSC / PAL (selectable in setup menu)
	Monitor (HDMI) Connector	[Main monitor] HDMI 4K UHD(3840x2160p) /30Hz, 4K UHD(3840x2160p) /25Hz, 1920x1080p /60Hz, 1920x1080p /50Hz, 1920x1080i /60Hz, 1920x1080i /50Hz [Sub monitor] HDMI 1920x1080p /60Hz, 1920x1080p /50Hz, 1920x1080i /60Hz, 1920x1080i /50Hz
	Audio Output Connector	-10 dBV, 600 Ω, unbalanced x1 (RCA pin jack)
Alarm / Control Terminal	Alarm	Alarm input 1 - 9 ²⁾ , Alarm output ³⁾ , Alarm reset input ³⁾ , Face matching output ⁵⁾
	Control	Time adjustment input/output ²⁾ , +5 V output ⁴⁾ , Emergency recording input
	Error/Warning	Network error output ³⁾ , HDD error / Recording error output ³⁾ , Camera error output ³⁾ , Recorder error output ³⁾
	Mouse Connection Port	2 (Front 1, Rear 1)
Network Port	Network Port	2x 10BASE-T / 100BASE-TX / 1000BASE-T (RJ45)
	USB Storage	USB 3.0 / USB 2.0 memory, USB 3.0 / USB 2.0 connected HDD (except bus powered device)
Network	Network Interface	2x 10BASE-T / 100BASE-TX / 1000BASE-T (RJ45)
	Maximum Recording Rate	192 Mbps or less
	Maximum Band Width	Total 384 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	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 (Master/Slave), NTP (Server/Client)
	Summer Time	User definable (using menu setup)
	Remote Monitoring on Smartphone/Tablet	16 clients or less ^{*6}
HDD	Type	8.89 cm (3.5 inch) Serial ATA HDD, Up to 2x HDDs can be installed.
	Maximum Capacity	Up to 12 TB will be supported. ^{*7}
	RAID	RAID 1
Viewer Software	Playback Control	PLAY, Rev PLAY, Pause, FF, FR, Prev Record, Next Record, Prev Image, Next Image
	Additional NX Viewer 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
	Safety / EMC Standard	CE (EN60065, EN55032 ClassB, EN55024), EAC
General Specifications	Power Source	220 V-240 V AC 50 Hz/60 Hz
	Power Consumption	approx. 56 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	Maximum Operating Altitude	2,000 m (6,562 feet) above sea level
	Dimensions	420 mm(W) x 88 mm(H) x 300 mm(D) {16-9/16 inches (W) x 3-7/16 inches (H) x 11-13/16 inches (D)}
	Mass (approx.)	When no HDD is installed: 5.2 kg {11.5 lbs}

*1 Three Additional Camera Kits WJ-NXE20 are necessary.
*2 Non-voltage make contact input, +3.3 V pull-up Approx. 23 kΩ
*3 Open collector output, 24 V DC, -200 mA max.
*4 +5V ±0.5 V 200 mA max.
*5 Additional Business Intelligence Kit WJ-NXF02 is necessary.
*6 Panasonic Security Viewer v.3.0 or later is required on smartphone/tablet PC.
*7 Please check the following URL for the latest information. (<https://security.panasonic.com/download/library/>)

Appearance



Trademarks and registered trademarks
- "i-PRO" logo is trademarks or registered trademarks of Panasonic Corporation.
- HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
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Important
- Safety Precaution : Carefully read the Important Information, Installation Guide and operating instructions before using this product.
- Panasonic cannot be responsible for the performance of the network and/or other manufacturers' products used on the network.

Optional Accessories

Additional Business Intelligence Kit
WJ-NXF02, WJ-NXF02W
WJ-NXF02(W) is a license kit intended to improve the usefulness of Network Disk Recorder WJ-NX200. After registering the WJ-NXF02(W) into WJ-NX200, WJ-NX200 is enabled statistical processing functions such as "People counting" and "Face matching / Age & Gender judgment". *2ch input per license

Additional Camera Kits
Number of cameras used in the system can be increased to 32 (maximum) by purchasing the Additional Camera Kits (WJ-NXE20, WJ-NXE20W : three license for 32 cameras).

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-NXS01, WJ-NXS01W	WJ-NXS04, WJ-NXS04W	WJ-NXS16, WJ-NXS16W	WJ-NXS32, WJ-NXS32W
1 camera	4 cameras	16 cameras	32 cameras

Rack Mount Bracket
WV-Q202

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

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