



# **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
- 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









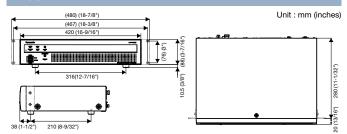
### **Specifications**

Supported	Compatible vendor	Panasonic i-PRO series Network cameras,			
Camera		ONVIF NVT conformant camera and encoder			
	Supported Image Format	H.265(HEVC), H.264, JPEG			
	Supported Image Resolution	•Aspect ratio [4 : 3]			
	(Depending on the camera)	4000x3000, 2560x1920, 2048x1536, 1280x960, 800x600, 640x480			
	(Boponaing on the damera)	•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			
	Maximum Number of Cameras	MAX. 32*1 (Default number of cameras : 9)			
Recording		Event, Schedule, Emergency			
riccording	Pre-alarm Recording	Up to 15 seconds "When the delivery speed from the network camera is less than 4 Mbps.			
	Sub-stream Recording	768 kbps (fixed data size)			
	Scheduled Recording Mode	16 programs, 6 time zones/day, Independent setup for each day of the week			
	Frame Rate/Camera	7 7			
		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),			
runctions		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 3 / 4 / 6 / 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	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, Playback by designating a timeline, VMD, Thumbnail			
	Сору	Recorded data of selected cameras and time date range can be copied to			
		the 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,			
	, i	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)			
Browser	Camera Control	Pan/Tilt, Zoom, Focus, Brightness, Preset position call and program (up to 256),			
GUI	a oomao	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,			
	r layback control	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			
	_ ' '	1 11 11			
	Image Download	Recorded data of selected camera and time range can be downloaded to a PC.			
	0	Viewer software can be downloaded separately.			
	Copy	Recorded data of selected cameras and time date range can be copied to the 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,			
	GOI Language				
	GOI Language	Thai, Simplified Chinese, Japanese			
	Required PC				

Alarm/	Alarm Source		9x Terminal inputs, 32x Camera alarms (Panasonic Alarm Protocol),	
Event			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	
	Event log		1000	
Input /	Spot Output Connector		1x 1 V [p-p] / 75 Ω (BNC) NTSC /PAL (selectable in setup menu)	
Output	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 ×1 (RCA pin jack)	
	Alarm /	Alarm	Alarm input 1 - 9°2, Alarm output°3, Alarm reset input°2	
	Control Terminal	Control	Time adjustment input/output*2, +5 V output*4	
		Frror/	Network error output <sup>-3</sup> , HDD error output <sup>-3</sup> , Camera error output <sup>-3</sup> ,	
		Warning	Recorder error output <sup>-3</sup> , Recording error output <sup>-3</sup> ,	
		" "	Face matching output*5*6, Emergency recording input	
	Mouse Connection Port		2 (Front 1, Rear 1)	
	Network Port		2x 10BASE-T / 100BASE-TX / 1000BASE-T (RJ45)	
	USB Storage		USB 3.0 / USB 2.0 memory,	
	l == 5.0.ago		USB 3.0 / USB 2.0 connected HDD (except bus powered device)	
Network	Network Interface		2x 10BASE-T / 100BASE-TX / 1000BASE-T (RJ45)	
HOLWOIK	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			
	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	Time Synchronization		Terminal (Master/Slave), NTP (Server/Client)	
Functions	Summer Time		User definable (using menu setup)	
	Remote Monitoring on		16 clients or less *7	
	Smartphone/Tablet			
HDD	Туре		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.*8	
	RAID		RAID 1	
Viewer			Play, Rev Play, Pause, FF, FR, Prev Record, Next Record, Prev Image, Next Imag	
Software			Alteration detection, Save as JPEG, Two times zoom, Print, Copy,	
			Aspect ratio switching, fish eye correction, corridor display*6	
	Supported OS, Language		Language of the software will be English or Japanese	
General			CE (EN60065, EN55032 ClassB, EN55024), EAC	
Specifications			220 V-240 V AC 50 Hz/60 Hz	
	Power Consumption		approx. 56 W	
	Ambient Operating		Main body: +5 °C to +45 °C (41 °F to 113 °F)	
	Temperature		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		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 Feature update \*7 Panasonic Security Viewer v.3.0 or later is required on smartphone/tablet PC. \*8 Please check the following URL for the latest information. ( http://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.
- ONVIF and the ONVIF logo are trademarks or registered trademarks of ONVIF Inc.
   All other trademarks identified herein are the property of their respective owners.

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

## **Optional Accessories**

Additional Business Intelligence Kit

## WJ-NXF02, WJ-NXF02W

W.I-NXE02(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



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