∺i·PRO

WJ-NU101KG

Preliminary

New higher secure level and easy installation NVRs with a build-in PoE+ switch

Network Disk Recorder

WJ-NU101KG Network video recorders, NVRs with a build-in PoE+ switch for 4ch.

Not only you don't need prepare PoE+ switch separately, but with new stylish slim design, you can install new NVRs anywhere easily like wall hanging, vertical installation[*1].

Additionally, you can maintain NVRs easily with screw-less structure for HDD kitting.

New NVRs are NDAA compliant with intel CPU, and they offer higher secure level operation with FIPS 140-2 level 3 Certified Secure Element and GlobalSign® certificate.

Not only integrate with Video Insight or WV-ASM300W, but new NVRs support all i-PRO AI products, you can enjoy i-PRO AI applications with i-PRO Active guard[*2].

i-PRO New NVR with a build-in PoE+ switch

- NVR is NDAA compliant with intel® CPU
- WJ-NU101KG can support up to 20 TB HDD
- ECO-writing: Acceleration of data access (reading/writing) by original file system
- i-PRO will release 4ch NVR with a build-in PoE+ switch for easy installation.

Easy installation

- With new stylish slim design, new NVRs can be installed in various way - like wall hanging, vertical installation.[*1]
- Screw-less structure for HDD kitting.

High Security

- FIPS 140-2 level 3 certified secure element is embeded
- GlobalSign® certificates pre-installed
- Equipped Kensington Security Slot

Perfectly adapted to i-PRO AI product

- New NVRs support all i-PRO AI products. With i-PRO Active guard, you can enjoy i-PRO AI applications such as Ai-VMD, AI people detection, in your NVR system[*2].

Connectivity

- With RTSP protocol, new NVRs can be connected with wide range of camera brands.
- With improved ONVIF connection, new NVRs have connectivity with almost all of major brands.[*3]

*1 This can be applied to WJ-NU101,201, and 300.

*2 You can enjoy some functions of our AI apps without i-PRO Active Guard.

*3 "Connectivity" means JPEG,H.264,H.265 connect support. Depends on camera brand, model number, firmware, those NVRs may no be able to connect.

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

H.265 / H.264 JPEG

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]** 3072x2304, 2560x1920, 2048x1536, 1600x1200, 1280x960, 800x600, 640x480 **•Aspect ratio [16 : 9]** 3840x2160, 3328x1872, 3072x1728, 2688x1520, 2560x1440, 1920x1080, 1280x720, 640x360 **•Aspect ratio [1 : 1]** 2992x2992, 2816x2816, 2192x2192, 2048x2048, 1440x1440, 1280x1280, 1200x1200 **•Aspect ratio [9 : 16]** 2160x3840, 1872x3328, 1728x3072, 1520x2688, 1440x2560, 1080x1920, 720x1280, 360x640
	Supported Audio Format	AAC-LC, G.711
	Maximum Number of Cameras	MAX. 4
Recording	Recording Mode	Event, Schedule, Emergency, Pre-event
	Pre-alarm Recording	Up to 15 seconds *When the delivery speed from the network camera is less than 4 Mbps.
	Sub-stream Recording	-
	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]** • Control screen 4 split screen display • Wide view screen 2 / 3 / 4 split screen display,1 screen sequence **[Sub monitor]** 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, Portuguese, Thai, Vietnamese, Simplified Chinese, Traditional Chinese, Japanese
	360 Camera Dewarp	Only 1ch display mode.
	re-encoding	2Client **(TBD)**
	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, 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, Camera number
	Display Mode	1 screen
	Image Download	File Format: Original Format 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	-
	System Log	Operator access (500), Network error (100), Error (1,000), Event (1000), Operation (500)
	GUI Language	English, French, Italian, Spanish, German, Portuguese, Thai, Vietnamese, 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 **(TBD)**

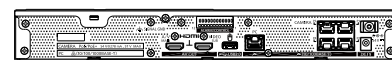| Alarm/ Event	Alarm Source	4x Terminal inputs, 4x Camera alarms (TCP alarm notification), 128x Command alarms
	Event Mode	Off / On
	Alarm Action	Alarm recording, E-mail notification, Alarm message, Camera positioning, Terminal output, TCP/HTTP alarm notification output, Buzzer, Indicator
	Alarm Control	Reset
	Event log	1000
Input / Output	Monitor (HDMI) Connector	**[Main monitor]** HDMI 4K UHD(3840x2160p)/30Hz, 4K UHD(3840x2160p)/25Hz, 1920x1080p /60Hz, 1920x1080p /50Hz **[Sub monitor]** HDMI 1920x1080p /60Hz, 1920x1080p /50Hz
	Alarm / Control Terminal — Alarm Control	Alarm input 4 *1, Alarm output*2 1 +5 V output*3, Emergency recording input, General purpose input*1/output*2
	Alarm / Control Terminal — Error / Warning	HDD error / Recording error output*2, Camera error output*2
	Mouse Connection Port	1 (USB 2.0)
	Network Port (PC)	1x 10BASE-T / 100BASE-TX / 1000BASE-T (RJ45)
	Network Port (Camera)	4x 10BASE-T / 100BASE-TX(RJ45), (RJ45, PoE+), PoE Budget (4 port Total : Max 50 W, Each port Max : 30 W)
	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	48 Mbps **(TBD)**
	Maximum Bandwidth	Total 96 Mbps **(TBD)**
	Supported Protocol	IPv4: TCP/IP, UDP/IP, HTTP, HTTPS, SMTP, DNS, NTP, SNMP, RTP, RTSP, ICMP, ARP IPv6: ICMPv6
	E-mail	Upon Alarm or Warning
	No. of Simultaneous Users	16 or less **(TBD)**
	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	NTP (Server/Client)
	Summer Time	User definable (using menu setup)
	Remote Monitoring on Smartphone/Tablet	16 clients or less *4
HDD	Type	3.5 inch
	Maximum Capacity	20 TB
	RAID	-
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	CE/UKCA (EN55032/EN55035)
	Power Source	DC 54 V 1.67 A **(TBD)** (included AC power adapter)
	Power Consumption	90 W **(TBD)** (DC 54 V 1.67 A)
	Ambient Operating Temperature	Main body : 0 °C to +45 °C (0 °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	340 mm(W) x 44 mm(H) x 230 mm(D) {13-3/8 inches (W) x 1-23/32 inches (H) x 9-1/16 inches (D)}
	Mass (approx.)	App 2.1 kg {4.6 lbs}

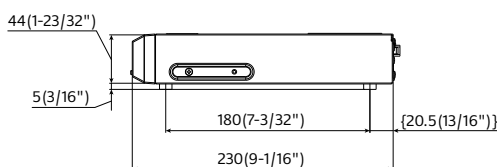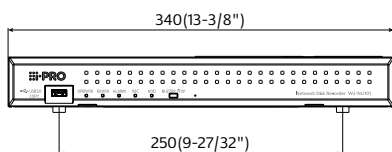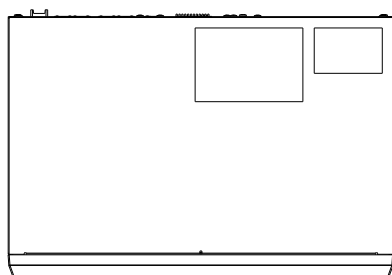*1 Non-voltage make contact input, +3.3 V pull-up Approx. 23 kΩ
*2 Open collector output, 24 V DC, -200 mA max.
*3 +5V ±0.5 V 200 mA max.
*4 i-PRO Mobile APP is required on smartphone/tablet PC.

Appearance

Unit : mm (inches)

340(13-3/8")
250(9-27/32")
44(1-23/32")
5(3/16")
180(7-3/32")
{20.5(13/16")}
230(9-1/16")

Optional Accessories

■ Rack mount bracket / Other

	Vertical installation	Rack mount	Wall
	1	1	1
combination	Vertical Mount Bracket **WV-QRM001** (Black)	Rack mount Bracket **WV-QRM101** (Black)	Wall mounting **WV-QRM201** (Black)

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.

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

i-PRO
The Power of Truth

i-PRO Co., Ltd.
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