

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 16 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

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



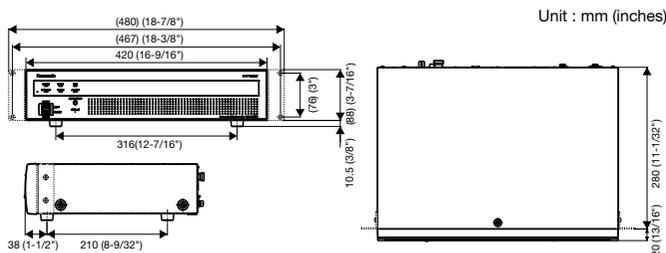
Specifications

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|----------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. 16 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 split screen display, 1 screen sequence, 4 / 9 / 16 split screen sequence [Sub monitor] 1 / 4 / 9 / 16 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), 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 re-encoding | Only 1ch display mode. | |
| | SD Memory Data Download | 2Client | |
| | Browser GUI | 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 | |
| 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 | |

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| Alarm/Event | Alarm Source | 9x Terminal inputs, 16x 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 | |
| | Event log | 1000 | |
| | Input / Output | 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 input 1 - 9 ² , Alarm output ³ , Alarm reset input ² |
| | | Control | Time adjustment input/output ³ , +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 | | 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 | 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 ⁵ | |
| 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. ⁶ | |
| | RAID | RAID 1 | |
| Viewer Software | 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 | |
| General Specifications | Safety / EMC Standard | cUL (UL60065), FCC Part15 ClassA | |
| | Power Source | 120 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 | 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 WJ-NXE20 is 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 Panasonic Security Viewer v.3.0 or later is required on smartphone/tablet PC.
⁶ Please check the following URL for the latest information. (<https://security.panasonic.com/download/library/>)

Appearance



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Optional Accessories

Additional Camera Kits

Number of cameras used in the system can be increased to 16 (maximum) by purchasing the Additional Camera Kits (WJ-NXE20, WJ-NXE20W : One license for 16 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 |
|---------------------|---------------------|---------------------|
| 1 camera | 4 cameras | 16 cameras |

Rack Mount Bracket
WV-Q202



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.

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<https://security.panasonic.com>

<http://www.facebook.com/PanasonicNetworkCamera>

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