# RNVR4108HS-8P-4KS2/L

## 8 Channel Compact 1U 1HDD 8PoE Network Video Recorder

- New 4.0 user interface, Security baseline 2.1
- H.264, H.265, Smart H.264+ and Smart H.265+. H.265 auto switch
- Max decoding capability: 8 × 1080p@30 fps. Supports adaptive decoding
- Supports mainstream cameras of ONVIF and RTSP protocols
- P2P remote surveillance, video play on mobile device
- VGA/HDMI simultaneous video output, maximum resolution of HDMI is 4K
- AI by Camera: Face detection, perimeter protection, IVS, people counting, heat map and SMD
- Supports remote configuration and management of IPC, such as setting parameters, getting information, and upgrading IPC of the same model in batches

### Series Overview

Rhodium RNVR4000-4KS2/L supports 4K and H.265 encoding technology with excellent performance at an affordable price. For applications where image details are highly required, it delivers the capability of 4K resolution processing. The NVR can be served as edge storage, central storage or backup storage with an intuitive shortcut operation menu for remote management and control.

Due to its cost-effective and easy-to-install design, this NVR is ideal for a wide range of applications such as public safety, water conservancy, transportation, city centers, education, and financial institutions.

The NVR is compatible with numerous third-party devices making it the perfect solution for surveillance systems that work independently of video management system (VMS). It features an open architecture that supports for multi-user access and is compatible with ONVIF Profile S, T, G protocol, enabling interoperability with IP cameras.

### Functions

#### Perimeter Protection by Camera
Automatically filters out false alarms caused by animals, rustling leaves, bright lights and etc.
Enable the system to act secondary recognition for the targets.
Improves alarm accuracy.

#### Face Detection by Camera
Face detection is to detect if there is any human face appearing in the video. This technology adopts a deep learning algorithm to support face detection, tracking, optimization and capturing, and then output the best face snapshot.

#### SMD Plus by Camera
With intelligent algorithm, Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

#### People Counting by Camera
With deep learning algorithm, People Counting technology can track and process moving human body targets to realize the accurate statistics of enter No., leave No., and In Area No. Working with management platform, it outputs yearly/monthly/weekly/daily reports to meet your requirements.

#### Smart Codec
With advanced scene-adaptive rate control algorithm, smart codec technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

#### Mobile App Client
The app is available on the iOS App Store and Google Play. It makes surveillance easy and simple, allowing you to remotely access back-end devices, view live video, receive event push notifications, and search for recorded videos from an iPhone, iPad, or Android phone at any time from virtually anywhere.

## Technical Specification

### System

| | |
|---|---|
| Main Processor | Industrial-grade embedded processor |
| OS | Embedded Linux |
| Operation Interface | WEB/operating in local GUI |

### Perimeter Protection by Camera

| | |
|---|---|
| Performance | 8 channels |
| AI Search | Search for pictures by channel, time and event type |

### Face Detection by Camera

| | |
|---|---|
| Performance | 4 channels |
| Face Attributes | 6 attributes:<br>Gender, age, glasses, expression, mouth mask, and beard |
| AI Search | Search for pictures by channel, time and face attributes |

### SMD Plus by Camera

| | |
|---|---|
| Performance | 8 channels |
| AI Search | Search by target classification (human, vehicle) |

### Video

| | |
|---|---|
| Access Channel | 8 |
| Network Bandwidth | Access: 80Mbps<br>Storage: 80Mbps<br>Forward: 60Mbps |
| Resolution | 8MP; 6MP; 5MP; 4MP; 3MP; 1080p; 720p; D1 |
| Decoding Capability | 8×1080p@30 fps |
| Video Output | 1×VGA output, 1×HDMI output<br>Supports simultaneous video sources output for VGA and HDMI |
| Multi-screen Display | 1 , 4, 8, 9 views |
| Third-party Camera Access | ONVIF; RTSP |

### Compression

| | |
|---|---|
| Video | Smart H.265/H.265/Smart H.264/H.264/MJPEG |
| Audio | PCM/G711A/G711U/G726/AAC |

### Network

| | |
|---|---|
| Network Protocol | HTTP; HTTPS; TCP/IP; IPv4/IPv6; UPnP; SNMP; RTSP; UDP; SMTP; NTP; DHCP; DNS; IP Filter; DDNS; FTP; Alarm Server; IP Search; P2P; auto register |
| Mobile Phone Access | Android; iOS |
| Interoperability | ONVIF(profile T/S/G); CGI; SDK |
| Browser | Chrome; IE9 or later; Firefox |

### Record Playback

| | |
|---|---|
| Multi-channel Playback | Up to 8 channels for playback |
| Record Mode | Manual record; alarm recording; SMD recording; smart recording |
| Storage | Local HDD; network |
| Backup | USB storage device |
| Playback Function | 1. Play/pause/stop/slow/quick/backward/by frame<br>2. Full screen, backup (video clip/file), partial zoom in, and audio on/off |

### Storage

| | |
|---|---|
| Disk Group | Yes |

### Alarm

| | |
|---|---|
| General Alarm | Motion detection, privacy masking, video loss, scene changing, PIR alarm, IPC external alarm |
| Anomaly Alarm | Camera disconnection, storage error, disk full, IP conflict, MAC conflict, login locked, and cybersecurity exception |
| Intelligent Alarm | Face detection, perimeter protection (intrusion and tripwire), IVS, people counting, heat map, and SMD alarms |
| Alarm Linkage | Recording, snapshot, local external alarm output, audio, buzzer, log, preset, and email |

### External Port

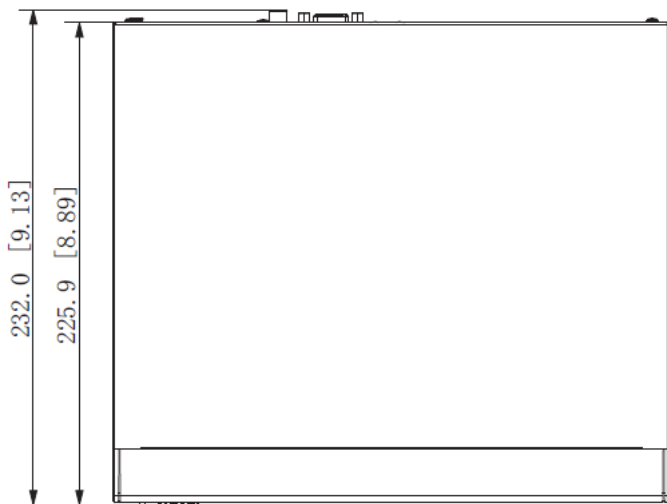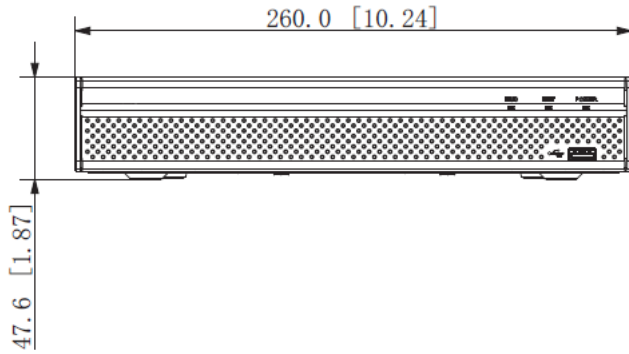| | |
|---|---|
| Audio Input | 1 × RCA input |
| Audio Output | 1 × RCA output |
| HDD | 1 SATA III port, up to 10TB for a single HDD. The maximum HDD capacity varies with environment temperature |
| USB | 2 (1×front USB2.0; 1×back USB2.0) |
| HDMI | 1 (supports up to 4K resolution output) |
| VGA | 1 |
| Network | 1×RJ-45, 10/100 Mbps self-adaptive Ethernet port |
| PoE | 8 |

### General Parameter

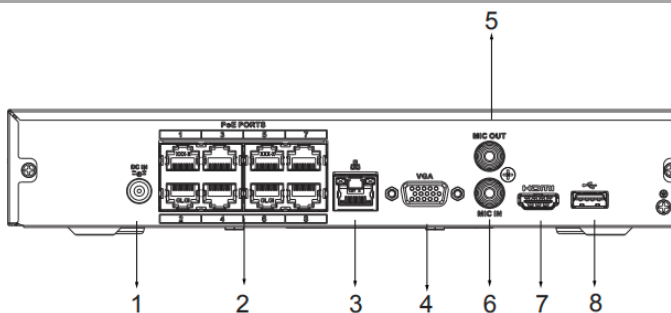| | |
|---|---|
| Power Supply | DC48V/53V, 2A/1.8 A |
| Power Consumption | < 10W (HDD not included, idling) Total output power of PoE is 72W, the maximum output power of a single port is 25.5W |
| Net Weight | 0.92Kg (2.03lb) |
| Gross Weight | 2.07Kg (4.56lb) |
| Product Dimensions | 260mm × 232.5mm x 50.3mm<br>(10.24" × 9.15" × 1.98")<br>(W × L × H) |
| Package Dimensions | 117mm × 373mm × 307mm<br>(4.61" × 14.69" × 12.09")<br>(W × L × H) |
| Operating Conditions | −10°C to +55°C (+10°F to +131°F) |
| Storage Conditions | 0°C to +40 °C (32 °F to 104 °F) |
| Operating Humidity | 10%~93% |
| Storage Humidity | 30%~85% |
| Operating Altitude | 3000m (9842.52ft) |
| Installation | Desktop mounted |
| Certifications | CE: EN62368-1; EN55032,EN55024, EN55035, EN61000-3-2, EN61000-3-3 EN50130-4<br>FCC: Part 15 Subpart B |

# RNVR4108HS-8P-4KS2/L

8 Channel Compact 1U 1HDD 8PoE Network Video Recorder

## Dimensions (mm[inch])

260.0 [10.24]

47.6 [1.87]

232.0 [9.13]

225.9 [8.89]

## Panels

| | | | |
|---|---|---|---|
| 1 | DC Power Input | 2 | PoE Ports |
| 3 | Network Port | 4 | VGA Port |
| 5 | AUDIO IN, RCA Connector | 6 | AUDIO OUT, RCA Connector |
| 7 | HDMI Port | 8 | USB Port |