# DHI-NVR2116HS-4KS3

16CH Compact 1U 1HDD Lite Network Video Recorder



- Supports Smart H.265+, H.265, Smart H.264+, H.264 and MJPEG decoding formats.
- Max. decoding capability: 6 × 1080p@30 fps.
- Max. 144/144/72 Mbps incoming/recording/outgoing bandwidth.
- Supports IP cameras with a resolution up to 12 MP.
- AI by Recorder supports 4-channel SMD.
- AI by Camera supports perimeter protection and SMD.
- Supports one-click arming and disarming.




## Series Overview

The NVR2000-4KS3 model of the Lite Series NVR is favored for its outstanding performance. It supports 4K resolution for scenes that require highly detailed images, and can serve as the edge, central, or backup storage with an intuitive shortcut menu for remote management and control. This NVR also features Smart Motion Detection (SMD) by recorder, which can distinguish target vehicles and humans from ordinary ones in real-time. This NVR is both cost-effective and easy-to-install, making it ideal for a wide range of applications such as villas, shops and other small and medium-sized scenes.

## Functions

### SMD Plus

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

### Perimeter Protection by Camera

Automatically ilters out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improves alarm accuracy.

## Technical Specification

### System

| | |
|---|---|
| Main Processor | Industrial-grade processor |
| Operating System | Embedded Linux |
| Operating Interface | Web, Local GUI |

### AI

| | |
|---|---|
| AI by Recorder | SMD |
| AI by Camera | Perimeter protection; SMD |

### Perimeter Protection

| | |
|---|---|
| Perimeter Performance of AI by Camera (Number of Channels) | All channels (4 targets/s) |

### SMD Plus

| | |
|---|---|
| SMD Plus by Recorder | 4 channels: Secondary filtering for human and motor vehicle, reducing false alarms caused by leaves, rain and lighting condition change |
| SMD Plus by Camera | All channels (8 targets/s) |

### Audio and Video

| | |
|---|---|
| Access Channel | 16 channels |
| Network Bandwidth | AI disabled: 144 Mbps incoming, 144 Mbps recording and 72 Mbps outgoing<br>AI enabled: 72 Mbps incoming, 72 Mbps recording and 36 Mbps outgoing |
| Resolution | 12 MP;8 MP;6 MP;5 MP;4 MP;3 MP;1080p;720p;960p;D1;CIF;QCIF |
| Decoding Capability | AI disabled: 1-channel 12 MP@30 fps; 1-channel 8 MP@30 fps; 2-channel 6 MP@30 fps; 2-channel 5 MP@30 fps; 3-channel 4 MP@30 fps; 6-channel 1080p@30 fps<br>AI enabled: 1-channel 8 MP@30 fps; 1-channel 6 MP@30 fps; 1-channel 5 MP@30 fps; 2-channel 4 MP@30 fps; 4-channel 1080p@30 fps |
| Video Output | 1 HDMI, 1 VGA<br>HDMI: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720<br>VGA: 1920 × 1080, 1280 × 1024, 1280 × 720 |
| Multi-screen Display | 1/4/8/9/16 |
| Third-party Camera Access | ONVIF |

### Compression Standard

| | |
|---|---|
| Video Compression | Smart H.265+; H.265; Smart H.264+; H.264; MJPEG |
| Audio Compression | G.711a; G.711u; PCM; G726; |

### Network

| | |
|---|---|
| Network Protocol | HTTP; HTTPS; TCP/IP; IPv4; IPv6; UDP; NTP; DHCP; DNS; SMTP; IP Filter; DDNS; IP Search (Supports IP camera, DVR, NVS, etc.); P2P; Auto Registration |
| Mobile Phone Access | iOS; Android |
| Interoperability | ONVIF 23.12(Profile T; Profile S; Profile G); CGI; SDK |
| Browser | Chrome; IE; Safari; Edge; Firefox |

### Recording Playback

| | |
|---|---|
| Multi-channel Playback | Up to 16 channels |
| Record Mode | General, motion detection; intelligent; alarm |
| Backup Method | USB device and network |
| Playback Mode | Instant playback; general playback; event playback; tag playback; smart playback |

### Alarm

| | |
|---|---|
| General Alarm | Motion detection; camera external alarm; PIR alarm |
| Anomaly Alarm | Error (no disk, disk error, low space, low quota space; network disconnection; IP conflict; MAC conflict); video loss; video tampering; camera offline |
| Intelligent Alarm | Perimeter protection; SMD Plus |
| Alarm Linkage | Recording; snapshot; buzzer; log; preset; email; tour |

### Port

| | |
|---|---|
| Audio Input | 1-channel RCA |
| Audio Output | 1-channel RCA |
| Alarm Input | NA (2 channels are optional) |
| Alarm Output | NA (1-channel 12 V 1 A output is optional) |
| Disk Interface | 1 SATA port. Each disk can contain up to 20 TB. this limit varies depending on the environment temperature. |
| USB | 2 (1 front USB 2.0 port, 1 rear USB 2.0 port) |
| HDMI | 1 |
| VGA | 1 |
| Network Port | 1 (10/100/1000 Mbps Ethernet port, RJ-45) |

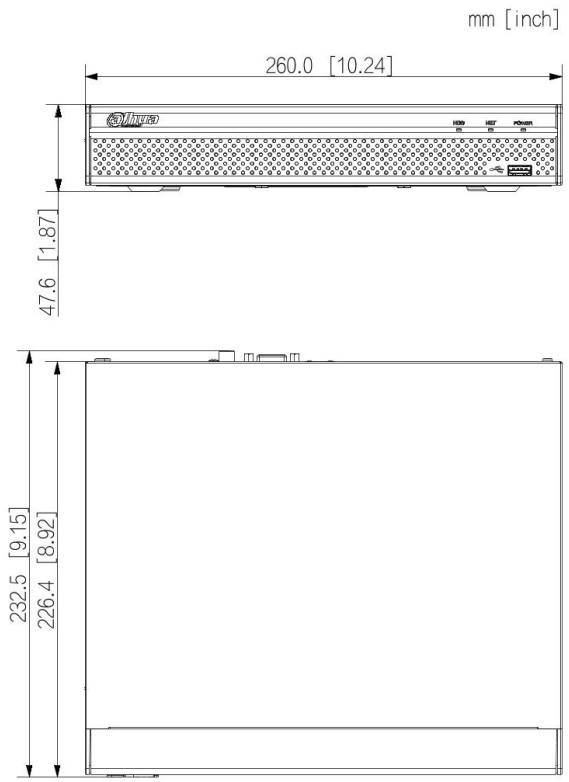
### General

| | |
|---|---|
| Power Supply | 12 VDC, 1.5 A |
| Power Consumption | <10 W (without HDD) |
| Net Weight | 0.85 kg (1.87 lb) |
| Gross Weight | 1.39 kg (3.06 lb) |
| Product Dimensions | 260.0 mm × 232.5 mm × 47.6 mm(10.24" × 9.15" × 1.87") (W × D × H) |
| Packaging Dimensions | 334.0 mm × 89.0 mm × 314.0 mm(13.15" × 3.50" × 12.36")(W × D × H) |
| Operating Temperature | –10 °C to +55 °C (14 °F to +131 °F) |
| Storage Temperature | –20 °C to +60 °C (–4 °F to +140 °F) |
| Operating Humidity | 10%–93% (RH), non-condensing |
| Certifications | CE-LVD: IEC 62368-1:2014<br>CE-EMC: EN IEC 61000-3-2:2019, EN 61000-3-3:2013+A1:2019, EN 55032:2015+A11:2020, EN 55035:2017+A11:2020, EN 55024:2010+A1:2015, EN 50130-4:2011+A1:2014 |

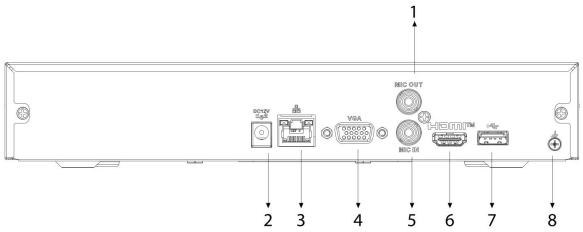
## Ordering Information

| Type | Model | Description |
|---|---|---|
| NETWORK VIDEO RECORDER | DHI-NVR2116HS-4KS3 | 16CH Compact 1U 1HDD Lite Network Video Recorder |

## Dimensions (mm[inch])




## Panels




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


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