

# VKDN 4104AKL

## 4 Channel Compact 1U 1HDD Network Video Recorder



#### **Series Overview**

Dahua NVR/L is introduced as the Lite series NVR that supports for 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 filtering out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improving 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, Dahua 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.

- · 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
- Al by Camera: Face detection, perimeter protection, IVS, people counting, heat map, and SMD
- Supports remote configuration and management of IPC, such as set ting parameters, getting information, and upgrading IPC of the same model in batches











#### **People Counting by Camera**

With deep learning algorithm, Dahua 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, Dahua 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.

#### **DMSS**

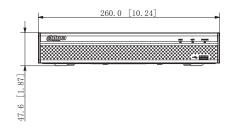
The DMSS app is available on the iOS App Store and Google Play. It makes surveillance easy and simple, allowing you to remotely access back-end devices, view live video, receive event push notifications, and search for recorded videos from an iPhone, iPad, or Android phone at anytime from virtually anywhere.

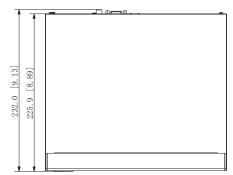
Technical Specification		
System		
Main Processor	Industrial-grade embedded processor	
OS	Embedded Linux	
Operation Interface	Web/operating in local GUI	
Perimeter Protection		
Performance	4 channels	
Al Search	Search for pictures by channel, time and event type	
Face Detection by Ca		
Performance	4 channels	
Face Attributes	6 attributes: Gender, age, glasses, expression, mouth mask, and beard	
Al Search	Search for pictures by channel, time and face attributes	
SMD Plus by Camera	secretified pictures by channel, time and face attributes	
Performance	4 channels	
Al Search	Search by target classification (human, vehicle)	
Video	Search by target classification (numari, vehicle)	
Access Channel	4	
Network Bandwidth	Access: 80 Mbps; Storage: 80 Mbps; Forward: 60 Mbps	
Resolution	8MP; 6MP; 5MP; 4MP; 3MP; 1080p; 720p; D1	
Decoding Capability	8 × 1080p@30 fps	
Video Output	$1\times \text{VGA}$ output, $1\times \text{HDMI}$ output, supports simultaneous video sources output for VGA and HDMI	
Multi-screen Display	1,4 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 (Support Dahua IP camera; DVR; NVS; etc.); 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 4 channels for playback	
Record Mode	Manual record; alarm recording; SMD recording; smart recording	
Storage	Local HDD; network	

Backup	USB storage device
Playback Function	Play/pause/stop/slow/quick/backward/by frame 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, audio, buzzer, log, preset, and email
External Port	
Audio Input	1 × RCA input
Audio Output	1 × RCA output
HDD	1 SATA III ports, up to 10 TB 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	$1 \times$ RJ-45, 10/100 Mbps self-adaptive Ethernet port
General Parameter	
Power Supply	12 VDC, 2A
Power Consumption	< 10 W (HDD not included, idling)
Net Weight	0.81 kg (1.79 lb)
Gross Weight	1.41 kg (3.11 lb)
Product Dimensions	260 mm × 232.5 mm × 50.3 mm (10.24" × 9.15" × 1.98") (W × L × H)
Package Dimensions	89 mm × 333 mm × 315 mm (3.50" × 13.11" × 12.40") (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	3000 m (9842.52 ft)
Installation	Desktop mounted
Certifications	CE: EN62368-1; EN55032,EN55024, EN55035, EN61000- 3-2, EN61000-3-3 EN50130-4 ECC: Part 15 Subpart B

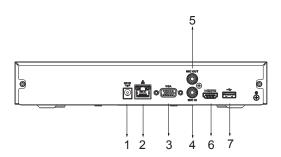
FCC: Part 15 Subpart B

## Dimensions (mm[inch])





## **Panels**



- 1 DC 12V Power Input
- 2 Network Port
- 3 VGA Port
- 4 AUDIO IN, RCA Connector
- 5 AUDIO OUT, RCA Connector
- 6 HDMI Port
- 7 USB Port