DAHUA TECHNOLOGY

DHI-N220104-4KS4
4CH Smart 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. 80/80/60 Mbps incoming/recording/outgoing bandwidth.

· Supports IP cameras with a resolution up to 12 MP.

· AI by Recorder supports 4-channel SMD Plus.

· AI by Camera supports perimeter protection and SMD Plus.

· Supports one-click arming and disarming.

SMD Plus | Perimeter Protection | 4K HDMI

Series Overview

The NVR22-4KS4 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 filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

Perimeter Protection by Camera
Automatically filters 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 Plus
AI by Camera	Perimeter protection; SMD Plus

Perimeter Protection

Perimeter Performance of AI by Camera (Number of Channels)	4 channels

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	4 channels

Audio and Video

Access Channel	4 channels
Network Bandwidth	80 Mbps incoming, 80 Mbps recording and 60 Mbps outgoing
Resolution	12 MP; 8 MP; 5 MP; 4 MP; 3 MP; 1080p; 720p; D1
Decoding Capability	AI disabled: 1-channel 12 MP@30 fps; 1-channel 8 MP@30 fps; 2-channel 5 MP@30 fps; 3-channel 4 MP@30 fps; 6-channel 1080p@30 fps AI enabled: 1-channel 8 MP@30 fps; 1-channel 5 MP@30 fps; 2-channel 4 MP@30 fps; 4-channel 1080p@30 fps

NVR22-4KS4 Series| DHI-N220104-4KS4

Video Output	1 HDMI, 1 VGA HDMI: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 VGA: 1920 × 1080, 1280 × 1024, 1280 × 720
Multi-screen Display	1/4
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 22.12(Profile T; Profile S; Profile G); CGI; SDK
Browser	Chrome; IE; Safari; Edge; Firefox

Recording Playback

Multi-channel Playback	Up to 4 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

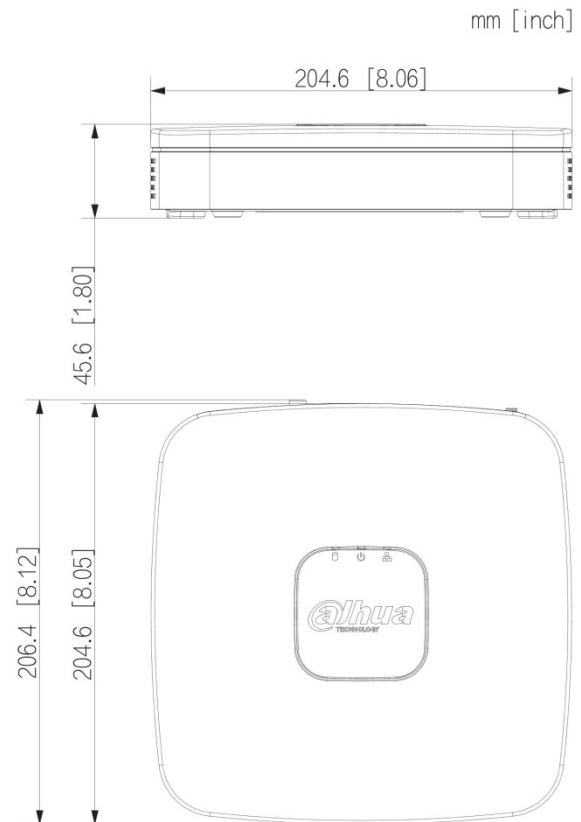|	
Audio Input	1-channel RCA
Audio Output	1-channel RCA
Alarm Input	NA (2 channels are optional)
Alarm Output	NA (1-channel 12 V 1 A output is optional)
HDD Interface	1 SATA port. Each disk can contain up to 20 TB. this limit varies depending on the environment temperature.
USB	2 (2 rear USB 2.0 ports)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

General

Power Supply	12 VDC, 1.5 A
Power Consumption	<10 W (without HDD)
Net Weight	0.45 kg (0.99 lb)
Gross Weight	1.05 kg (2.31 lb)

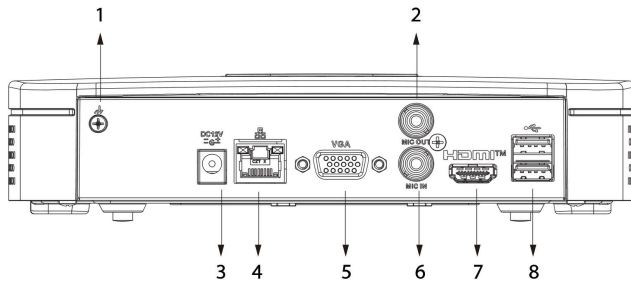|	
Product Dimensions	204.6 mm × 206.4 mm × 45.6 mm(8.06" × 8.12" × 1.80") (W × D × H)
Packaging Dimensions	364.0 mm × 96.0 mm × 261.0 mm(14.33" × 3.78" × 10.28")(W × D × H)
Operating Temperature	−10 °C to +55 °C (14 °F to +131 °F)
Storage Temperature	−20 °C to +60 °C (−4 °F to +140 °F)
Operating Humidity	10%−93% (RH), non-condensing
Installation	Rack or desktop
Certifications	CE-LVD: IEC 62368-1:2014 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-N220104-4KS4	4CH Smart 1U 1HDD Lite + Network Video Recorder

Dimensions (mm[inch])

Panels

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