alhua
TECHNOLOGY

DHI-NVR4216-16P-4KS2/L
Network Video Recorder

- New UI interface with more easier operation experience
- Smart H.265+/ Smart H.264+
- P2P remote surveillance, video play on mobile device
- 16–ch@720P(30FPS), self-adaptive decoding capability
- Supports mainstream cameras of ONVIF and RTSP protocol
- VGA/HDMI simultaneous video output, maximum resolution of HDMI is 4K
- Remote configuration and management of IPCs, such as setting parameters, acquiring information and upgrading IPCs of the same model in batches
- DHCP(Dynamic Host Configuration Protocol), HTTP(Hypertext Transfer Protocol), NTP(Network Time Protocol) and DDNS(Dynamic Domain Name System)

System Overview

This network video recorder is a highly cost-effective product, providing functions such as local live view, multi-screen display, real-time storage on local HDD, fast operation by mouse, remote management and control.

Functions

New User Interface
The new web and local GUI interface uses flat design which is more consistent with users' habits. Functional modules are divided clearer and easier to understand.

Decoding (Smart H.265+/Smart H.264+)
Dahua smart encoding (H.265+/ H.264+) is the optimized implementation of (H.265/H.264) codec that uses a scene-adaptive encoding strategy, providing more efficiency in the encoding process and higher video quality, and reducing the cost of storage and transmission significantly.
This NVR supports the corresponding decoding.

SMD
SMD (Small Motion Detection) function improves the practical value of motion detection by intelligently analyzing and distinguishing human and vehicle in videos. Alarm event will be triggered only when human or vehicle is detected.

Security Center
Security Center provides a whole picture of device security and helps protect the NVR with security scan, attack defense, certificate management, audio and video encryption and security settings. Security warnings will be sent trough many ways such as email, message, voice prompts.

4K Resolution
4K resolution is a revolutionary breakthrough in image processing technology. 4K delivers four times the resolution of standard HDTV 1080p cameras and offers superior picture quality and image details. 4K resolution improves the clarity of a magnified scene to view or record crisp forensic video from large areas.

Intelligent Video System
Working with IVS-enabled IP cameras, the NVR recognizes and records video that contains IVS data on all IP channels. The NVR records standard intelligence at-the-edge features, as well as premium IVS features that detect abandoned or missing objects, Tripwire violations, and intrusion violations. The NVR is also capable of recording business analysis data Facial Detection, People Counting, and Heat Map from IP cameras with built-in Intelligent Business Analytics.

Application

This NVR is suitable for places such as retail stores, families, courtyards and public areas.
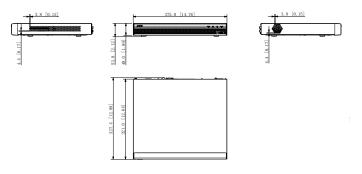
Technical Specification

System

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

Video

Access Channel	16 channels
Network Bandwidth	128 Mbps for access, 128 Mbps for storage and 64 Mbps for forwarding
Resolution	8MP/5MP/4MP/3MP/1080P/720P/D1/CIF
Decoding Capability	16–ch@720P(30FPS)
Video Output	1 VGA/1 HDMI simultaneous video output, maximum resolution 4K
Multi-screen Display	1/4/8/9/16
Third Party Camera Access	ONVIF, RTSP

Compression

Video	Smart H.265+/H.265/Smart H.264+/H.264
Audio	G.711A/G.711U/PCM/G726

Network

Network Protocol	HTTP, HTTPS, TCP/IP, IPv4, RTSP, UDP, NTP, DHCP, DNS, P2P
Mobile Phone Access	iDMSS (iOS)/gDMSS (Android)
Access Standard	ONVIF (profile S), CGI, SDK
Browser	Chrome, IE9 or above, Firefox

Record Playback

Multi-channel Playback	Up to 16 channels playback
Record Mode	Priority of record mode: Manual recording > alarm recording > motion detection recording > timed recording
Storage	Local HDD
Backup	USB device
Playback Function	1. Play, pause, stop, fast forward, fast backward, rewind, play by frame 2. Full screen, backup (cut/file), partially enlarge, audio on/off

Alarm

General Alarm	Motion detection, privacy masking, video loss, IPC alarm
Anomaly Alarm	Front-end device going offline, storage error, full storage, IP conflict, MAC conflict, login lock, network security anomaly
Alarm Linkage	Video recording, snapshot, log, preset point, tour

External Port

HDD	2 SATA ports, up to 8 TB for a single HDD. The maximum HDD capacity varies with environment temperature.
USB	1 front USB 2.0 port, 1 rear USB 2.0 port
HDMI	1
VGA	1
RCA Input	1
RCA Output	1
Alarm	4 alarm input ports, 2 alarm output ports
Network	1 RJ–45 port (10/100/1000 Mbps), 16 RJ–45 ports with PoE power supply (10/100 Mbps)

General Parameter

Power Supply	100V–240V, 47Hz–63HZ, 3.5A
Power Consumption	Total output of NVR is ≤ 10W (without HDD) Total output power of PoE is 117W, the maximum output power of a single port is 25.5W
Net Weight	2.63kg (5.80 lb)
Gross weight	3.91kg (8.62 lb)
Dimensions	375mm × 320mm × 48.2mm (W × L × H) 14.76 inch × 12.60 inch × 1.90 inch (W × L × H)
Packaging Dimensions	170mm × 449mm × 421mm (W × L × H) 6.69 inch × 17.68 inch × 16.57 inch (W × L × H)
Operating Temperature	-10°C to +55°C (+14°F to +131°F)
Storage Temperature	0°C to +40°C (+32°F to +104°F)
Operating Humidity	10%–90%
Storage Humidity	30%–85%
Operating Altitude	3000 m (9843 ft)
Installation	Desktop mounting
Certification	CE/FCC/UL

Dimensions (mm[inch])