

16Ch E Series PoE 4K NVR



System Overview

This is our new 16 Channel Ultra HD AI-Powered NVR from our E Series line of products. With this amazing security recorder, you can record 16 IP cameras at up to 8MP per camera. This new NVR has 16 PoE+ ports embedded right into the recorder; you won't need to worry about separate switches since you can simply plug your IP cameras into the back of your NVR. In business and residential applications, it is essential that you have high definition video in case you are ever the victim of a crime. Whether you're viewing in 4K or zooming in digitally to your recorded video, details can be the difference in police being able to successfully identify a criminal or prove a crime beyond a reasonable doubt.

Features

Perimeter Protection

These functions significantly improve accuracy. Perimeter Protection reduces false alarms and decreases pixel count requirements for object detection it also features custom tripwires based on object type for automation in limited access areas such as pedestrian or vehicle-only zones. This combination of advanced AI analytics and real-time alerts to a desktop or a mobile client reduces system requirements as well as resources, resulting in greater surveillance system efficiency.

Face Detection

Whether you wish to recognize, identify or verify a person, a camera with facial recognition software is an efficient solution. It can help you improve customer service and protect your assets by identifying important customers or potential perpetrators.

SMD Plus

SMD Plus (Smart Motion Detection Plus), is an upgraded version of SMD that greatly improves the alarm accuracy by loading deep-learning algorithm that helps analyzes person and vehicle shapes based on motion.

- H.265/H.264 codec decoding
- Max 160 Mbps Incoming Bandwidth
- HDMI/VGA simultaneous video output
- Supports remote configuration and management
- P2P remote surveillance



People Counting

This feature counts the number of people that go in a specified region and the number of people that come out. This is perfect for businesses, banks and anybody who wants to monitor the amount of people coming and going.

SMART H.265+

Smart H.265+ technology is a collection of intelligent encoding algorithms based on H.265. Smart H.265+ codec can effectively enhance video encoding efficiency according to the characteristics of different surveillance environments, it can also greatly reduce transmission bit rate, storage capacity to improve the overall system.

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: Gender, age, glasses, expression, mouth mask, and beard
AI Search	Search for pictures by channel, time and face attributes

SMD Plus by Camera

Performance	12 channels
AI Search	Search by target classification (human, vehicle)

Video

Access Channel	16
Network Bandwidth	Access: 160 Mbps; Storage: 160 Mbps; Forward: 64 Mbps
Resolution	8MP; 6MP; 5MP; 4MP; 3MP; 1080p; 720p; D1
Decoding Capability	8 × 1080p@30 fps
Video Output	1 × VGA output, 1 × HDMI output, supports simultaneous video sources output for VGA and HDMI
Multi-screen Display	1, 4, 8, 9, 16 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 16 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 2. Full screen, backup (video clip/file), partial zoom in, and audio on/off
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Storage

Disk Group	Yes
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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

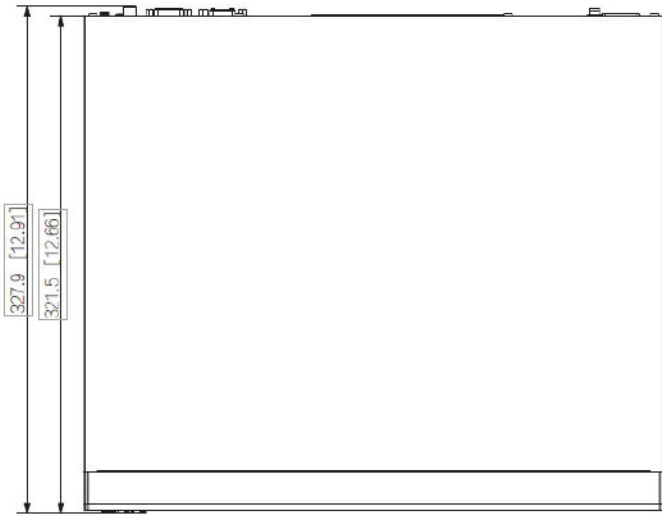
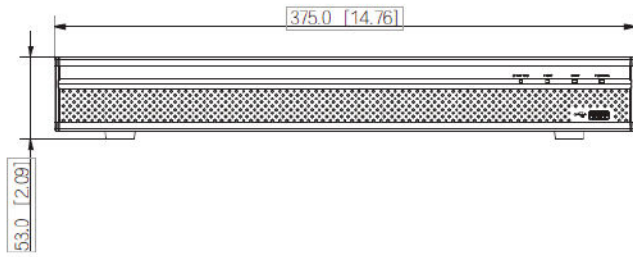
External Port

Audio Input	1 × RCA input
Audio Output	1 × RCA output
HDD	2 SATA III ports, up to 10 TB for a single HDD. The maximum HDD capacity varies with environment temperature
Alarm Input	4
Alarm Output	2
USB	2 (1 × front USB2.0; 1 × back USB2.0)
HDMI	1 (supports up to 4K resolution output)
VGA	1
Network	1 × RJ-45, 10/100/1000 Mbps self-adaptive Ethernet port
PoE	16

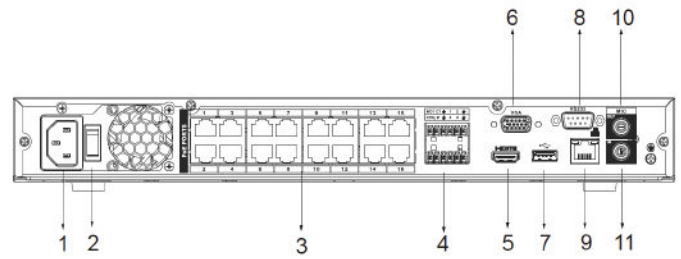
General Parameter

Power Supply	100 V~240 V, 47 Hz~63 HZ, 3.5 A
Power Consumption	< 10 W (HDD not included, idling) Total output power of PoE is 117W, the maximum output power of a single port is 25.5W
Net Weight	2.63 kg (5.80 lb)
Gross Weight	3.91 kg (8.62 lb)
Product Dimensions	375 mm × 327.4 mm × 53.8 mm (14.76" × 12.89" × 2.12") (W × L × H)
Package Dimensions	170 mm × 449 mm × 421 mm (6.69" × 17.68" × 16.57") (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 FCC: Part 15 Subpart B

Dimensions



Rear Panel



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| 1 | Power Input Port | 2 | Power Switch |
| 3 | PoE Ports | 4 | NO1 C1/CTRL P |
| 5 | HDMI Port | 6 | VGA Port |
| 7 | USB Port | 8 | RS232 Port |
| 9 | Network Port | 10 | AUDIO OUT, RCA Connector |
| 11 | AUDIO IN, RCA Connector | | |

