

# NE16E4P12-EP/AI

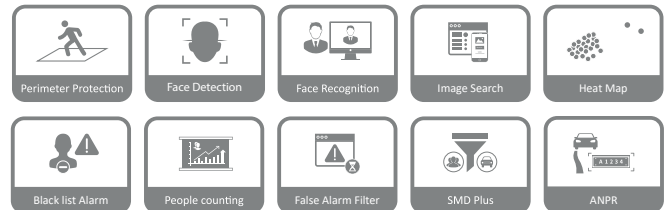
## 16 Channel AI NVR



- 16 Channel IP video access
- Smart H.265+/H.265/Smart H.264+/H.264/MJPEG
- Up to 2 Channel video stream face recognition  
8 channel picture stream face recognition (with FD camera)
- Up to 10 face databases with 20,000 face images in total
- 1-8 PoE Ports support ePoE & EoC

### System Overview

This AI NVR offers more than ever before. Now supporting facial recognition thanks to its internal database, it can process up to 12 face pictures per second on 2 channels of video stream facial recognition at a time, or it can support up to 8 channels of picture stream facial recognition when paired with our Elite IP cameras that offer Face Detection as part of their IVS (intelligent video system) features. You can have up to 10 face databases storing a total of 20,000 facial images in total. Each of these databases can be applied to video channels independently.



### Features

#### Perimeter Protection

Perimeter Protection functions significantly improve accuracy. Perimeter Protection reduces false alarms and decreases pixel count requirements for object detection. Perimeter Protection 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.

#### Real Time Face Recognition

Real Time Face Recognition allows you to search for people in real time with your security system. You can use features such as gender, age, expression, glasses, moustache, mouth mask. This allows you to identify people and also capture and record faces with metadata. You can use facial feature filtering in real time to identify specific facial features.

#### Stranger Mode

When in stranger mode, if the NVR detects a face not in device's database it can trigger an alarm, buzzer, snapshot, or record, along with other options. This function can be used for important places where access control is critical.

#### AI Search

Using stored information you can quickly identify people and vehicles from massive video data. This makes it easier to trace back to a certain person, vehicle, or point in time. Now you can search for targets with ease.

#### ANPR

Automatic Number Plate Recognition supports license plate recognition. You can add license plate numbers to your database for use when searching through recorded video.

## Technical Specification

### System

Main Processor	Multi-core embedded processor
Operating System	Embedded LINUX

### Perimeter Protection

Performance	4 channel, 10 IVS rules for each channel
Object classification	Human/Vehicle secondary recognition for tripwire and intrusion
AI Search	Search by target classification (Human, Vehicle)

### Face Recognition

	Max 12 face pictures/sec processing
Performance	2 channel video stream face recognition/8 channel picture stream face recognition (with FD camera)
Stranger Mode	Detect strangers' faces (not in device's face database). Similarity threshold can be set manually.
AI Search	Up to 8 target face images search at same time, similarity threshold can be set for each target face image.
Database Management	Up to 10 face databases with 20,000 face images in total. Name, gender, birthday, address, certificate type, certificate No., countries&regions and state can be added to each face picture.
Database Application	Each database can be applied to video channels independently.
Trigger Events	Buzzer, Voice Prompts, Email, Snapshot, Recording, Alarm Out, PTZ Activation, etc.

### Audio and Video

IP Camera Input	16 Channel
Two-way Talk	1 Channel Input, 1 Channel Output, RCA

### Display

Interface	1 HDMI, 1 VGA
Resolution	HDMI: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 VGA: 1920 × 1080, 1280 × 1024, 1280 × 720
Decoding Capability	2-ch@8MP (30fps), 8-ch@1080P (30fps)
Multi-screen Display	1/4/8/9/16

### Recording

Bandwidth	200 Mbps (80 Mbps when AI function enabled, based on Dahua private protocol)
Compression	Smart H.265+/H.265/Smart H.264+/H.264/MJPEG
Resolution	12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080P, 1.3MP, 720P, D1 etc.
Record Mode	Manual, Schedule (Continuous, MD (Motion Detection), Alarm, IVS)
Record Interval	1–120 min (default: 60 min), Pre-record: 1–30 sec, Post-record: 10–300 sec

### Video Detection and Alarm

Trigger Events	Alarm Out, Video Push, Email, Recording, PTZ, Tour, Snapshot, Voice Prompt, Buzzer and Screen Tips
Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering and Scene Change
Alarm Input	16 Channel

Alarm Output	4 Channel
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### Playback and Backup

Sync Playback	1/4/9/16
Search Mode	Time/Date, Alarm, MD and Exact Search (accurate to second)
Backup Mode	USB Device/Network

### Third-party Support

Third-party Support	Arecont Vision, Airlive, AXIS, Canon, Dynacolor, JVC, LG, Panasonic, Pelco, Xunmei, Samsung, Sanyo, Sony, Watchnet and more
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### Network

Interface	1 RJ-45 Port (10/100/1000 Mbps)
PoE	16 ports (IEEE802.3af/at) 1-8 ports support ePoE & EoC
Network Function	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, SNMP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Center, IP Search (Support Dahua IP camera, DVR, NVS, etc.), P2P
Max. User Access	128 users
Mobile App	iPhone, iPad, Android
Interoperability	ONVIF (Profile S), SDK, CGI

### Storage

Internal HDD	4 SATA III Ports, Up to 8 TB capacity for each HDD
eSATA	NA

### Auxiliary Interface

USB	2 USB Ports (1 Rear USB 3.0, 1 Front USB 2.0)
RS232	1 Port, for PC Communication and Keyboard
RS485	1 Port, for PTZ Control

### Electrical

Power Supply	Single, AC100-240V, 4A
	NVR: <8.2W (Without HDD)
Power Consumption	PoE: Max 25.5W for single port 150W total rated power

### Environmental

Operating Conditions	-10°C to +55°C (+14°F to +131°F), 86–106kpa
Storage Conditions	0°C to +40°C (+32°F to +104°F), 30–85% RH

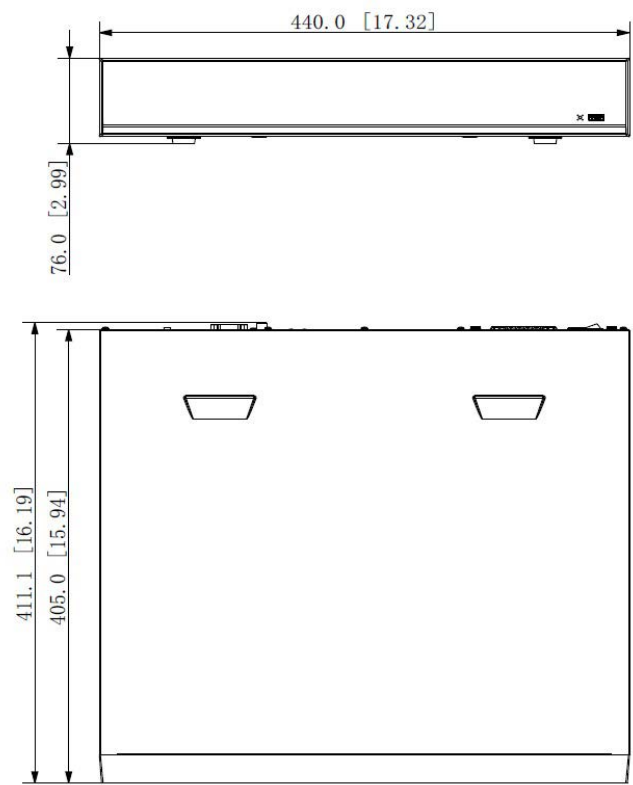
### Construction

Dimensions	1.5U, 440.0 mm × 411.1 mm × 76.0 mm (17.32" × 16.19" × 2.99")
Net Weight	4.79 kg (10.6 lb) (without HDD)
Gross Weight	7.11 kg (15.7 lb) (without HDD)

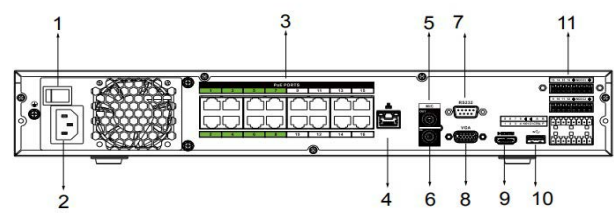
### Certifications

CE	EN55035, EN55032, EN55024, EN50130-4, EN60950-1
FCC	Part 15 Subpart B, ANSI C63.4-2014

Dimensions



Rear Panel



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|----|--------------------------|----|-------------------------|
| 1  | Power Switch             | 2  | Power Input             |
| 3  | PoE Ports                | 4  | Network Port            |
| 5  | AUDIO OUT, RCA Connector | 6  | AUDIO IN, RCA Connector |
| 7  | RS-232 Port              | 8  | VGA Port                |
| 9  | HDMI Port                | 10 | USB Port                |
| 11 | Alarm In/Out             |    |                         |