

# NVR 16-Channel PoE 2 SATA

## 1U 16 PoE Network Video Recorder



- Dual-core Embedded Processor
- Up to 16 IP Camera Inputs, with 4-Channel IVS Recording
- Smart H.264+ / MJPEG Dual Codec Decoding
- Max 200 Mbps Incoming Bandwidth
- Up to 5 MP Resolution for Preview and Playback
- 16 Channel Synchronous Realtime Playback
- 2 SATA HDDs, Up to 12 TB
- IPC UPnP, 16 PoE Ports
- 3D Intelligent Positioning with Dahua PTZ Camera



### System Overview

Dahua's NVR42A16-16P is one of the NVRs which have the most reasonable price and best quality for IP video surveillance applications. The NVR provides up to 5MP resolution. It supports 16 channels of IP camera inputs, 16 local live-view channels, and 16 playback channels. Additionally, the NVR features a mouse shortcut operation menu, remote management and control, centre storage, edge storage, and back-up storage.

Designed as a low-cost, easy installation, 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 with or without a video management system (VMS). Its open architecture supports multi-user access and is compatible with ONVIF 2.4, enabling interoperability when combined with IP cameras.

### Functions

#### 4 MP / 5 MP Resolution

The NVR supports 4MP HD resolution (2560 x 1440) and 5 MP HD resolution (2560 x 1920) for recording, live viewing and playback.

#### Intelligent Video System (IVS) Recording

Working with IVS-enabled IP cameras, the NVR recognizes and records video that contains IVS data on a maximum of (4) 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.

#### Plug and Play

The Smart Add function benefits users with basic IP video surveillance knowledge as the NVR automatically finds your devices making it as easy as using an analog system. Note: the NVR and cameras must be on the same router.

#### Smart H.264+

Delivering high quality video without straining the network, Smart H.264+ is the optimized implementation of H.264. The Smart H.264+ encoding platform includes a scene adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction, providing a savings of up to 70% of bandwidth and storage when compared with standard H.264.

## Technical Specification

### System

Main Processor	Dual-core embedded processor
Operating System	Embedded LINUX

### Display

Interface	1 HDMI, 1 VGA
Resolution	1920 × 1080 , 1280 × 1024, 1280 × 720 , 1024 × 768
Display Split	1/4/8/9/16
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording

### Video Detection and Alarm

Trigger Events	Recording, PTZ, Tour, Alarm Out, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips
Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss and Camera Blank
Alarm input	4 Channel, Low Level Effective, Green Terminal Interface
Relay Output	2 Channel, NO/NC Programmable, Green Terminal Interface
Tracking Trigger Event	Targeting, Zoom, Tracking, Recording, Snapshot, Alarm

### Playback and Backup

Sync Playback	1/4/8/16
Search Mode	Time /Date, Alarm, MD and Exact Search (accurate to second), Smart search
Playback Function	Play, Pause, Stop, Rewind, Fast play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom
Backup Mode	USB Device/Network/Internal SATA burner

### Storage

Internal HDD	2 SATA III Ports, Up to 12 TB
HDD Mode	Single

### Auxiliary Interface

USB	2 USB Ports (1 rear USB 3.0 , 1 front USB 2.0 )
RS232	1 Port, for PC Communication and Keyboard

### Third-party Support

Third-party Support	Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, CP Plus, Honeywell, Panasonic, Pelco, Samsung, Sanyo, Sony, Videotec, Vivotek, and more
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### Audio and Video

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

### Recording

Compression	Smart H.264+ / MJPEG
Resolution	5MP (2560 × 1920), 4MP (2560 × 1440), 3MP (2048 × 1536), 1080p (1920 × 1080), 720p (1280 × 720), D1 (704 × 576/704 × 480)
Record Rate	200 Mbps
Bit Rate	4 8Kbps to 8192 Kbps Per Channel
Record Mode	Manual, Schedule (Regular, Continuous), MD (Video detection: Motion Detection, Camera Blank Video Loss), Alarm, Stop
Record Interval	1 to 120 min (default: 60 min), Pre-record: 1 to 30 sec, Post-record: 10 to 300 sec

### Network

Interface	RJ-45 Port (10/100/1000 Mbps)
PoE	16 ports (IEEE802.3at/af)
Network Function	HTTP, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search (Supports Dahua IP cameras, DVRs, NVRs)
Max. User Access	128 users
Smart Phone	iPhone, iPad, Android
Interoperability	ONVIF 2.4, CGI

### Electrical

Power Supply	Single, 100 to 240 VAV, 47/63 Hz
Power Consumption	NVR: < 30W, without HDD
Total PoE Power	25.5 W single port, 130 W total

### Environmental

Operating Conditions	-10°C to +55°C (+14°F to +131°F), 0 to 90% RH, 86 to 106 kpa
Storage Conditions	-20°C to +70°C (-4°F to +158°F), 0 to 90% RH

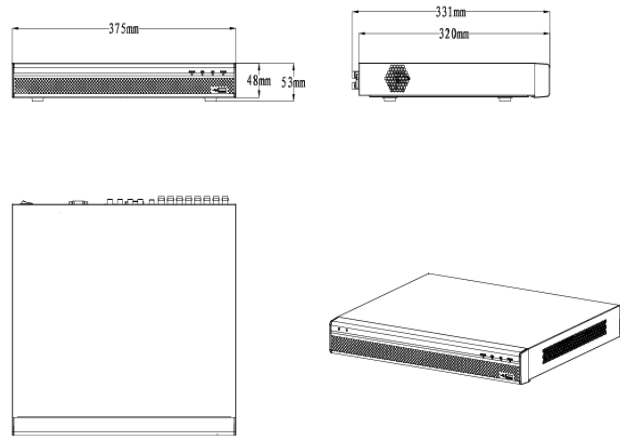
Construction

Dimensions	375.0 mm x 331.0 mm x 53.0 mm (14.80 in. x 13.0 in. x 2.10 in.)
Net Weight	2.50 kg (5.50 lb), without HDD
Gross Weight	4.0 kg (8.80 lb)
Installation	Rack mount

Certifications

FCC	SEFD1410127-A
UL	E234884-A22-UL

Dimensions (mm/inch)



Ordering Information

Part Number	Description
DHI-NVR42A16-16P	200Mbps / 200Mbps (16 channel IP Video Inputs), 4 channel @4MP / 8 channel @1080p, Audio, Alarm, 1U
DHI-NVR42A16-16P 1TB	200Mbps / 200Mbps (16 channel IP Video Inputs), 4 channel @4MP / 8 channel @1080p, Audio, Alarm, 1U, 1TB HDD
DHI-NVR42A16-16P 2TB	200Mbps / 200Mbps (16 channel IP Video Inputs), 4 channel @4MP / 8 channel @1080p, Audio, Alarm, 1U, 2TB HDD
DHI-NVR42A16-16P 3TB	200Mbps / 200Mbps (16 channel IP Video Inputs), 4 channel @4MP / 8 channel @1080p, Audio, Alarm, 1U, 3TB HDD
DHI-NVR42A16-16P 4TB	200Mbps / 200Mbps (16 channel IP Video Inputs), 4 channel @4MP / 8 channel @1080p, Audio, Alarm, 1U, 4TB HDD
DHI-NVR42A16-16P 6TB	200Mbps / 200Mbps (16 channel IP Video Inputs), 4 channel @4MP / 8 channel @1080p, Audio, Alarm, 1U, 6TB HDD