

# 16-Channel 4K 2 SATA

## 1U 16 PoE 4K Network Video Recorder



- H.265/H.264/MJPEG/MPEG4 Codec Decoding
- Max 320 Mbps Incoming Bandwidth
- Up to 12 MP Resolution Preview and Playback
- IVS Recording on all IP Channels
- HDMI/VGA Simultaneous Video Output
- 3D Intelligent Positioning with Dahua PTZ Camera
- Support IPC UPnP, 16 PoE Ports for PoE Model



### System Overview

Dahua's NVR52A16-16P-4KS2 network video recorder offers an excellent performance and high recording quality for IP video surveillance applications. For applications where details are critical for identification, this professional NVR provides a powerful processor with up to 4K resolution. 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 4K cameras.

### Functions

#### Fisheye Dewarping

The NVR features multiple fisheye dewarping modes to make viewing video easy whether its live or during playback.

#### N+M Hot Standby

The highly reliable redundancy N+M Hot Standby design provides a secure, failover technique ensuring immediate backup. In the event of a system failure, the slave instantly takes over the master ensuring no data is lost.

### 4K Resolution

The NVR supports 4K Ultra HD resolution (3840 x 2160) 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 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.

### Heat Map

The NVR's Heat Map option highlights the areas with the highest concentration of people. This information can then be exported into a customized report to assist in business or forensic analysis.

### Point of Sale (POS)

Ideal for grocery and retail stores, the optional POS solution allows the NVR to receive a POS transaction via corresponding video. This feature allows merchants to analyze specific transactions via the Fuzzy search Algorithm.

### Smart Tracking

The auto tracking PTZ feature automatically tracks a moving target throughout the camera's field of view. This function is ideal for following an object as it moves through airports, parking lots, city centers, or other applications.

### Automatic Network Replenishment (ANR) Technology

Network Video Recorders with the ANR function automatically store video data on an IP camera SD card when the network is disconnected. After recovery of the network, the NVR automatically retrieves the video data stored on the camera.



## Technical Specification

### System

<b>Main Processor</b>	Quad-core Embedded Processor
<b>Operating System</b>	Embedded LINUX

### Display

<b>Interface</b>	1 HDMI (up to 3840 x 2160), 1 VGA
<b>Native Output Resolution</b>	3840 x 2160, 1920 x 1080, 1280 x 1024, 1280 x 720, 1024 x 768
<b>Maximum Decoding</b>	2Ch@12MP 20fps 2ch@12MP 15fps 4ch@8MP 30fps 5Ch@6MP 30fps 6ch@5MP 30fps 8Ch@4MP 30fps 11ch@3MP 30fps 16ch@1080p 60fps 16Ch@1080P/ 720p 30fps
<b>OSD</b>	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording

### Video Detection and Alarm

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

### Playback and Backup

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

### Storage

<b>Internal HDD</b>	2 SATA III Ports, Up to 10 TB per HDD
<b>HDD Mode</b>	Single

### Auxiliary Interface

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

### Third-party Support

<b>Third-party Support</b>	Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, CP Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsung, Sanyo, Sony, Videotec, Vivotek, and more
----------------------------	---

### Audio and Video

<b>IP Camera Input</b>	16 Channel
<b>Two-way Talk</b>	1 Channel Input, 1 Channel Output, RCA

### Recording

<b>Compression</b>	H.265/H.264/MJPEG/MPEG4
<b>Supported IP Camera Resolution</b>	12 MP / 8 MP / 6 MP / 5 MP / 4 MP / 3 MP / 1080p / 720p / D1
<b>Maximum Incoming Bandwidth</b>	320 Mbps
<b>Bit Rate</b>	16 kbps to 20 Mbps per channel
<b>Record Mode</b>	Manual, Schedule (Regular (Continuous), MD, Alarm), Stop
<b>Record Interval</b>	1 to 120 min (default: 60 min), Pre-record: 1 to 30 sec, Post-record: 10 to 300 sec

### Network

<b>Ethernet</b>	1 RJ-45 Port (10/100/1000 Mbps)
<b>PoE Ports</b>	16 ports (IEEE802.3at/af)
<b>Network Function</b>	HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPOE, DDNS, FTP, Alarm Server, IP Search(Support Dahua IP camera, DVR, NVS), P2P
<b>Max. User Access</b>	128 users
<b>Smart Phone</b>	iPhone, iPad, Android
<b>Interoperability</b>	ONVIF 2.4, CGI Conformant

### Electrical

<b>Power Supply</b>	Single, 100 to 240 VAC, 50/60 Hz
<b>Power Consumption</b>	NVR: 15.2 W, without HDD
<b>Total PoE Budget</b>	25.5 W single port, 130 W total

### Environmental

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

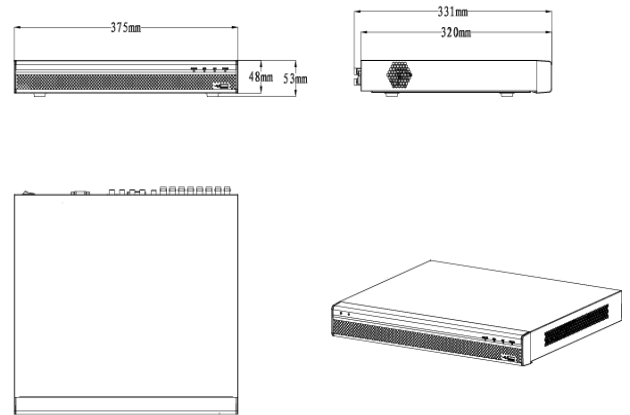
**Construction**

Dimensions	
<b>NVR</b>	1U, 375.0 mm × 331.0 mm × 53.0 mm (14.70 in. x 13.0 in. x 2.10 in.)
<b>NVR with PFH101 Rack Mount Tray</b>	482.60 mm × 331.0 mm × 56.0 mm (19.0 in. x 13.0 in. x 2.20 in)
<b>Net Weight</b>	2.60 kg (5.73 lb), without HDD
<b>Gross Weight</b>	4.0 kg (8.81 lb)
<b>Installation</b>	Rack mount

**Certifications**

<b>CE</b>	EN55022, EN55024, EN50130-4, EN60950-1
<b>FCC</b>	Part 15 Subpart B, ANSI C63.4-2014
<b>UL</b>	UL 60950-1 + CAN/CSA C22.2 No. 60950-1

**Dimensions (mm)**



**Ordering Information**

Type	Part Number	Description
16 Channel 4K PoE NVR	DHI-NVR52A16-16P-4KS2	16 Channel PoE 4K Network Video Recorder
Accessory, optional	PFH101	Rack Mount Tray 482.60 mm x 281.20 mm x 43.7 mm (19.0 in. x 11.07 in. x 1.72 in.)