Dahua TECHNOLOGY

16-Channel 4K 2 SATA
2U 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
- 2 HDMI/VGA Simultaneous Video Output
- 3D Intelligent Positioning with Dahua PTZ Camera
- Support IPC UPnP, 16 PoE Ports for PoE Model
- Supports RAID 0 /1/5/6/10

| Pro Series | H.265 | TRACKING Smart Tracking | Face Detection | Heat Map | Tripwire | Intrusion | Missing Abandon Detection |

System Overview

Dahua's NVR58A16-16P-4KS2 network video recorder offers a 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

RAID 0/1/5/6/10
Offering a balance between storage performance, storage capacity,and data integrity, the NVR features Fruitfull RAID 0/1/5/6/10 for faster and safer recording.

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.

ONVIF

Pro Series |NVR58A16-16P-4KS2

Technical Specification

System

Main Processor	Quad-core embedded processor
Operating System	Embedded LINUX

Display

Interface	2 HDMI (1 HDMI up to 3840 x 2160, Different Source), 1 VGA
Resolution	3840 x 2160, 1920 × 1080, 1280 × 1024, 1280 × 720, 1024 × 768
Multi-screen Display	1st Screen: 1/4/8/9/16 2nd Screen: 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	16 Channel, Low Level Effective, Green Terminal Interface
Relay Output	6 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)
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/eSATA Device

Storage

Internal HDD	8 SATA III Ports, up to 10 TB per HDD
HDD Mode	Single, Raid 0/1/5/6/10 Enterprise-level HDD recommended
eSATA	1 eSATA port

Auxiliary Interface

USB	2 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

Third-party Support

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

Audio and Video

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

Recording

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

Network

Ethernet	1 RJ-45 port (10/100/1000 Mbps)
PoE Ports	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(Support Dahua IP camera, DVR, NVS and etc.), P2P
Max. User Access	128 users
Smart Phone	iPhone, iPad, Android
Interoperability	ONVIF 2.4, CGI Conformant

Electrical

Power Supply	Single, 100 to 240 VAC, 50/60 Hz
Power Consumption	NVR: 17.5 W, without HDD
Total PoE Power	25.5 W single port, 150 W total

Environmental

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

Construction

Dimensions	2U, 440.0 mm × 455.10 mm × 94.90 mm (17.30 in. x 17.90 in. x 3.70 in.)
Net Weight	7.0 kg (15.43 lb), without HDD
Gross Weight	9.80 kg (21.60 lb)
Installation	Rack Mount Ears Included

Certifications

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

Ordering Information

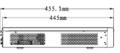| Type	Part Number	Description
16 Channel 4K PoE NVR	DHI-NVR58A16-16P-4KS2	16 Channel PoE 4K Network Video Recorder (includes rack mount ears)
Accessories	ESS5104C	External HDD accessories, 4 HDD
	ESS5108C	External HDD accessories, 8 HDD

Accessories

ESS1504C

ESS1508C

Dimensions (mm)