16-Channel 4K 2 SATA

2U 16 PoE 4K Network Video Recorder



- H.265/H.264/MJPEG/MPEG4 Codec Decoding
- Max 320Mbps Incoming Bandwidth
- Up to 12MP resolution Preview & Playback
- 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



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)
With built-in intelligent video analytics, the NVR has the ability to detect and analyze moving objects for improved video surveillance. The NVR provides optional standard intelligence at the edge allowing detection of multiple object behaviors such as abandoned or missing objects. IVS also supports Tripwire analytics, allowing the camera to detect when a pre-determined line has been crossed, People Counting, ideal for business intelligence, and Facial Detection, for searching or identification of individuals.

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.

ANR (Automatic Network Replenishment Technology)
Video record in SD card in IP cameras when the network breaks down, and after the network recovered, the video will be transferred to NVR and then recorded in it.

Technical Specification

System

Main Processor	Quad-core embedded processor
Operating System	Embedded LINUX

Display

Interface	2 HDMI (1 HDMI up to 3840x2160, Different Source), 1 VGA
Resolution	3840x2160, 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 48 TB
HDD Mode	Single, Raid 0/1/5/6/10
eSATA	1 eSATA port

Auxiliary Interface

Front Cover	N/A
USB	2 Ports (1 Rear USB3.0,1 Front USB2.0)
SAS	N/A
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	12MP /8MP /6MP /5MP /4MP /3MP /1080p / 720p / D1
Record Rate	320Mbps
Bit Rate	16kbps~20Mbps for per channel
Record Mode	Manual, Schedule(Regular(Continuous), MD, Alarm), Stop
Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec

Network

Interface	1 RJ-45 port (10/100/1000Mbps)
Ethernet Port	1 Independent 1000Mbps Ethernet Ports
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
Optical Fiber Interface	N/A
Max. User Access	128 users
Smart Phone	iPhone, iPad, Android
Interoperability	ONVIF 2.4, CGI Conformant

Electrical

Power Supply	Single, AC 100~240V, 50/60 Hz
Power Consumption	NVR: 17.5W (without HDD) PoE: Max 25.5W for single port, 150W in total

Environmental

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

Construction

Dimensions	2U, 440mm × 455.1mm × 94.9mm (17.3" x 17.9" x 3.7")
Net Weight	7kg (15.43 lb) (without HDD)
Gross Weight	9.8kg (21.6 lb)
Installation	Rack Mount Ears Included

Certifications

FCC	VFHKEM1607001084IT
UL	E234884-A109-UL

Accessories



ESS1504C

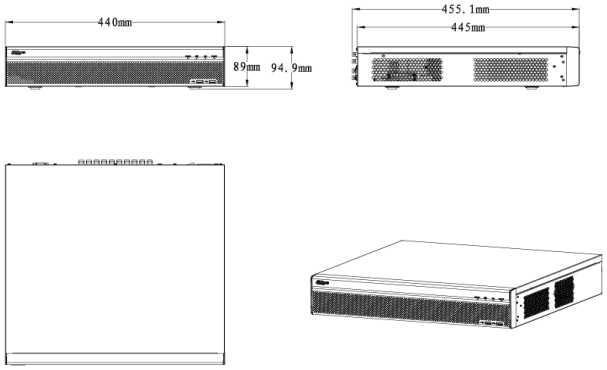


ESS1508C

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

Dimensions (mm)



Rev 001.001 © 2016 Dahua All rights reserved. Design and specifications are subject to change without notice