COG-NVR-4K-16BB

16 CHANNEL 1U LITE 4K NETWORK VIDEO RECORDER



- Smart H.265+/H.265/Smart H.264+/H.264
- Max 200Mbps Incoming Bandwidth
- Up to 8MP Resolution for Preview and Playback
- Up to 2ch@4K/8ch@1080P decoding
- HDMI/VGA simultaneous video output
- Support IPC UPnP, 16PoE ports



System Overview

For applications where image details are highly required, this NVR delivers the capability of 4K resolution processing. The NVR can be served as edge storage, central storage or backup storage with an intuitive shortcut operation menu for remote management and control.

Due to its cost-effective and easy-to-install design, 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 that work independently of video management system (VMS). It features an open architecture that supports for multi-user access and is compatible with ONVIF 2.4 protocol, enabling interoperability with IP cameras.

Functions

4K Resolution

4K resolution is a revolutionary breakthrough in image processing technology. 4K delivers four times the resolution of standard HDTV 1080p cameras and offers superior picture quality and image details. 4K resolution improves the clarity of a magnified scene to view or record crisp forensic video from large areas.

Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

Intelligent Video System

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.

ANR (Automatic Network Replenishment 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.

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Technical Specification

System

Main Processor	Quad-core embedded processor
Operating System	Embedded LINUX

Aduio and Video

IP Camera Input	16/32 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 Capacity	2ch@4K 30fps, 8ch@1080P 30fps
Multi-screen Display	16ch: 1/4/8/9/16
	32ch: 1/4/8/9/16/25/36
OSD	Camera title, Time, Camera lock, Motion detection, Recording

Recording

Compression	Smart H.265+/H.265/Smart H.264+/H.264
Resolution	8Mp/ 6Mp/ 5MP/ 4MP/ 3MP/ 1080P/ 1.3MP/ 720P etc.
Record Rate	200Mbps
Bit Rate	16Kbps ~ 20Mbps Per Channel
Record Mode	Manual, Schedule (Regular, Continuous), MD (Video detection: Motion Detection, Tampering, Video Loss), Stop
Record Interval	1 ~ 120 min (default: 60 min), Pre-record: 1 ~ 30 sec, Post-record: 10 ~ 300 sec

Video Detection and Alarm

Trigger Events	Recording, PTZ, Tour, Video Push, Email, Snapshot, Buzzer and Screen Tips
Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss and Tampering
Alarm input	4 Channel
Alarm output	2 Channel

Playback and Backup

Playback	1/4/9/16
Search Mode	Time /Date, 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, Backup Selection, Digital Zoom
Backup Mode	USB Device/Network

Third-party Support

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

Network

Interface	1 RJ-45 Port (10/100/1000Mbps)
Ethernet Port	1 Independent 1000Mbps Ethernet Port
PoE	16 ports (IEEE802.3at/af)
Network Function	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, SNMP, IP Search (Support Dahua IP camera, DVR, NVS, etc.), Easy4ip
Max. User Access	128 users
Smart Phone	iPhone, iPad, Android
Interoperability	ONVIF 2.4, SDK, CGI

Storage

Internal HDD	2 SATA III Ports, Up to 6 TB capacity for each HDD
HDD Mode	Single

Auxiliary Interface

USB	2 ports(1 USB2.0, 1 USB3.0)
RS232	1 Channel
RS485	N/A

Electrical

Power Supply	AC100V ~ 240V, 50 ~ 60 Hz
Power Consumption	NVR: < 13.2W(without HDD)
	PoE: Max 25.5w for single port, 130w 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	1U, 375mm×327.5mm×53mm (14.8" x 12.9" x2.1")
Net Weight	2.6kg (5.7 lb) (without HDD)
Gross Weight	4kg(8.8 lb)(without HDD)

Certifications

CE	EN55032, EN55024, EN50130-4, EN60950-1
FCC	Part 15 Subpart B, ANSI C63.4-2014
UL	UL60950-1

Dimensions (mm)

