



16MP 16 Channel 16 PoE 1U NVR w/ Analytics

SKU: NVR16P16-2BI-NCV

- 16 Ch PoE at 30W per port up to max 240W
- Decoding of 2x at 16MP/30FPS or 16x at 1080P/30FPS
- Two Way Talk with 1/1 Audio In/Out
- ANR Technology
- 8/2 Alarm In/Out with 1x RS485
- Max 2x 16TB Hard Drive Capacity



Smart Intrusion Prevention

Utilizing machine learning and data intelligence, Smart Intrusion Prevention or SIP helps reduce false-alarm rates by allowing you to set up Cross Line Detection, Intrusion Detection, as well as Enter / Leave Area, all which can do any combination of human/vehicle/non-motor vehicle recognition. Smart Intrusion Prevention's detection rate of >95% helps you improve your perimeter protection, reduce false alarms while keeping you informed about the events that matter the most to you.

Ultra Motion Detection

Utilizing machine learning and data intelligence, Ultra Motion Detection or UMD helps you filter out objects based on motion detection, detecting motion of specified object types in the image, and trigger an alarm when such motion is detected. UMD supports two different object types: Person and Vehicle. UMD provides a detection rate of >90% up to 49ft and is more efficient than traditional motion detection, further reducing false-alarms. Ultra Motion Detection can be configured to your full screen or specific area(s) for detection.

Face Detection

Analyze and compare face capture snapshots with face detection characteristics and internal face databases. When paired with a face capture IP NCV series camera, access real-time, processing and cataloging of detected faces. Receive instant notifications of triggered alarms by extracting facial features and attributes, comparing them against an existing database or watchlist. Face detection enables quick identification, individual tracking, and can alert when certain attributes meet the configured triggers. Face detection enhances security efficiency and accuracy with proactive monitoring and retrospective searches.

People Counting

The NVR16P16-2BI-NCV detects and tracks target by using advanced image processing technology and deep learning algorithm. You can draw 4 polygon areas, and count people in each area; When the number of the people in the area is greater than or equal to/lower than or equal to the defined threshold, the alarm will be triggered.

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Bandwidth

With a higher throughput of 320Mbps your IP network cameras can record at higher frame rates and resolutions without maxing out.

Crowd Density

With deep learning algorithm, the NVR16P16-2BI-NCV can detect the crowd density on the image, and display it on heat map; it can detect people quantity and density in selected area and set threshold. When the number or density is larger or smaller than the threshold, it triggers linkage.

Heat Map

The NVR16P16-2BI-NCV supports heat map reporting for number of people and average strand time. You can observe customer's regions of interest from two aspects: number of people and time.

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.

Auto-Tracking

This feature controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene. The tracking action can be triggered manually or automatically by defined rules. Once a rule is triggered, the camera can zoom in and track the defined target automatically.

Cross Line

Cross line detection is a feature that allows you to set virtual lines within the camera's field of view to trigger when an object crosses. This feature is particularly useful for monitoring perimeters, entrances, and other critical areas. This enhances your security by providing real-time notifications of potential events assisting in unauthorized access with quick responses.

Leave Area

Leave Area detection allows users to define specific areas and receive notifications when an object leaves that specified area and meets specific criteria and sends notifications when rules are triggered.

Defocus Detection

Defocus detection is crucial for maintaining high-quality video evidence by sending real-time alerts when a camera becomes defocused. Preventing blurred and unusable surveillance footage, defocus detection helps enhance the reliability and effectiveness your your security systems.

ULTRA 265 Compression

Utilizing H.265 advanced video encoding, provides high-quality video while reducing the storage space needed to retain your video events. Users can add their own memory card to take advantage of its edge recording capabilities.

NDAA Compliance

The John S. McCain National Defense Authorization Act (NDAA) is a United States federal law which specifies the budget, expenditures and policies of the U.S. Department of Defense. For Fiscal Year 2019, the NDAA Section 889, prohibits the U.S. government from procuring video and telecommunication equipment from certain Chinese companies and their subsidiaries. Some non government projects may require NDAA compliance if federal funding is being used.

Enter Area

Enter Area detection allows users to define specific areas and receive notifications when an object enters that defined area and meets specific criteria and sends notifications when rules are triggered.

Scene Change

Scene Change detection is an intelligent feature that monitors for specific alterations in the camera's field of view. This feature alerts the users when the camera's perspective suddenly changes. This helps alert and notify users of potential tampering or attempting to obstruct the camera view making it valuable for retail security, public spaces, and critical infrastructure protection.

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Product Specifications

DECODING	
Decoding Format	Ultra 265, H.265, H.264
Decoding Capability	Smart Off: 2 x 16MP@30, 2 x 12MP@30, 4 x 4K@30, 8 x 4MP@30, 10 x 3MP@30, 16 x 1080P@30 Smart On: 2 x 12MP@30, 2 x 4K@30, 6 x 4MP@30, 8 x 3MP@30, 12 x 1080P@30, 16 x 720P@30
Audio Compression	G.711A, G.711U

NETWORK	
Incoming Bandwidth	Smart Off: 320Mbps Smart On: 160Mbps
Outgoing Bandwidth	160Mbps
Remote Users	128
Protocols	TCP/IP; P2P; NTP; DHCP; PPPoE; HTTP; HTTPS; DNS; DDNS; SNMP; SMTP; NFS; RTSP; IPV6
Browser(Plugin)	Windows:IE(IE10/11), Firefox (version 52.0 and above), Chrome(version 45 and above), Edge(version 79 and above)

VIDEO/AUDIO INPUT	
IP Video Input	16-ch
RCA Audio Input	1-ch

VIDEO / AUDIO OUTPUT	
HDMI Output	HDMI: 4K(3840 x 2160) / 30Hz, 1920 x 1080p / 60Hz, 1920 x 1080p / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz
VGA Output	VGA: 1920 x 1080p / 60Hz, 1920 x 1080p / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz
RCA Audio Output	1-ch
Liveview Display	1 / 4 / 6 / 8 / 9 / 16
Corridor Mode Screen	3 / 4 / 5 / 7 / 9 / 10 / 12 / 16

TWO-WAY AUDIO	
Two-way Audio	1-ch, RCA(Using the audio input and output)

SNAPSHOT	
FTP / Schedule / Event Snapshot	4-ch snapshot, up to 4K resolution

RECORDING	
Recording Resolution	16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080P / 960P / 720P / D1 / 2CIF / CIF
Synchronous Playback in Local	16-ch

SMART	
VCA Detection by IPC	Face Detection; Vehicle Detection; SIP(Intrusion Detection, Cross Line Detection, Enter Area, Leave Area); Ultra Motion Detection(UMD); Temperature Detection(Fire Detection, Smoking Detection, Temperature Measurement, Smoke and Fire Detection); People Counting(People Flow Counting, Crowd Density Monitoring); Video Metadata; Traffic Monitoring
Smart by NVR	Face Detection; Smart Intrusion Prevention (SIP); Ultra Motion Detection(UMD)
VCA Search	Motor Vehicle Search; Non-Motor Vehicle Search; Human Body Search; General Search; People Counting Report; Heat Map
Smart by IPC	All channels (up to 8 images/s in total) Face Detection, Vehicle Detection, Temperature Detection, SIP, UMD, Video Metadata, Traffic Monitoring
Search by Image	Support
Vehicle Picture Library	Up to 5 vehicle picture libraries, with up to 25,000 vehicle pictures in total
SIP by NVR	4-ch
UMD by NVR	8-ch
Capacity of Snapshot Records	2 millions records for face snapshot; 2 millions records for vehicle snapshot; 3 millions records for SIP; 2 millions records for video Metadata

ALARM	
General Alarm	Defocus Detection; Scene Change Detection; Object Left Behind; Object Removed; Auto Tracking; Motion Detection; Tampering; Human Body Detection; Video Loss; Alarm Input; Audio Detection
Alert Alarm	IP Conflict; Network Disconnected; Disk Offline; Disk Abnormal; Illegal Access; Hard Disk Space Low; Hard Disk Full; Recording/Snapshot Abnormal; Array Damaged; Array Degraded

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Product Specifications Cont.

GUI LANGUAGE	
GUI Language	38 languages: Simplified Chinese, Traditional Chinese, English, Vietnamese, Thai, Turkish, Spanish (Latin America), Portuguese (Brazil), Spanish, Portuguese, French, German, Italian, Dutch, Polish, Czech, Hungarian, Slovak, Russian, Hebrew, Arabic, Ukrainian, Estonian, Bulgarian, Greek, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenia, Serbia, Korean, Japanese, Latvian, Lithuanian, Persian

HARD DISK	
SATA	2 SATA Interfaces
Capacity	Up to 16TB for each HDD(The maximum HDD capacity varies with environment temperature)
Disk Group	Support
Redundant Storage	Support
Disk Array Type	RAID 1

EXTERNAL INTERFACE	
Network Interface	1 RJ45 10M/100M/1000M self-adaptive Ethernet Interface
USB	Front panel: 1 x USB2.0;Rear panel: 1 x USB2.0, 1 x USB3.0
RS485	1
RS232	N/A
Alarm In	8-ch
Alarm Out	2-ch
Power Supply	AC 100~240V
Power Switch	Support

POE	
Interface	16 RJ45 10M/100M self-adaptive Ethernet Interface
Max Power	Max 30W for single port, Max 240W in total
Supported Standard	IEEE 802.3at, IEEE 802.3af

WORKING ENVIRONMENT	
Working Temperature	14 °F ~ 122 °F
Working Humidity	≤ 90% RH (non-condensing)
Power Consumption (without HDD)	≤ 12W

DIMENSIONS	
Weight (without HDD)	6.0lb
Height	1U
Dimensions	15.0"×12.7"×2.1"

CERTIFICATION	
Certification	CE, FCC, UL, RoHS, WEEE
CE	EN 55032, EN 61000-3-3, EN IEC 61000-3-2, EN 55035
FCC	Part15 Subpart B

Additional Products



OPTIVIEW'S VIDEO MONITORING SOFTWARE
Remote Monitoring



SURVEILLANCE DRIVES
4TB / 8TB / 10TB



IP8MIBC-28-SDAU-NCV
4K Bullet Camera IP Camera w/ Mic



IP8MAB-28-CNAU-NCV
4K Armor Ball w/ Starlight & Built-in Mic



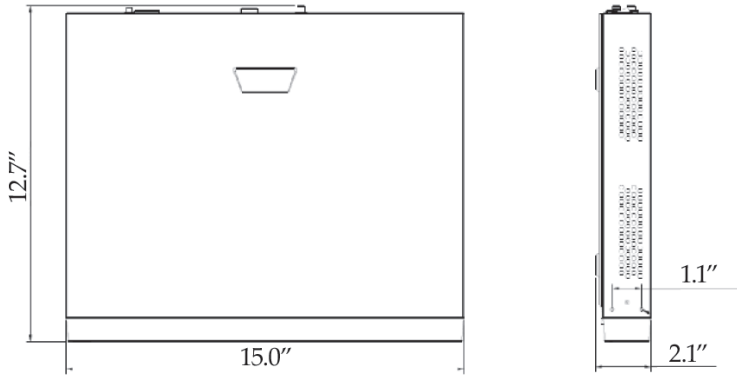
IP5MPTZ-4XADM-NCV
5MP Active Deterrence PTZ w/ Built-in Mic

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Dimensions



Backplate

