NVR-MX08POE-1U4K1
16 Channel 1U 8PoE 4K&H.265 Network Video Recorder

IC REALTIME

- Smart H.265+/H.265/Smart H.264+/H.264
- Max 160Mbps Incoming Bandwidth
- Up to 8MP Resolution for Preview and Playback
- Supports Perimeter Protection, Intelligent Motion Detect and Face Detect by camera
- HDMI/VGA simultaneous video output
- Up to 2 8TB HDDs, Built-in 8 Port PoE

System Overview

The NVR-MX series are introduced as IC Realtime's Max line of NVRs supporting 4K and H.265 encoding technology with excellent performance at an affordable price. This 8 channel recorder supports IVS and AI by camera such as Perimeter Protection, Intelligent Motion Detect and Face Detection. This NVR has a built in 8 port PoE and supports up to two HDDs up to 8TB each.

The NVR is equipped with an open architecture that supports for multi-user access and is compatible with ONVIF 2.4 protocol, enabling interoperability with multiple third-party IP cameras.

Made in South Korea and conforms to the Trade Agreements Act (TAA).

Functions

iMD (Intelligent Motion Detect) by camera
This is an upgraded version of motion detection currently known as Intelligent Motion Detection (iMD). The upgraded Plus version greatly improves alarm accuracy by pre-loading a deep learning algorithm that recognizes people and vehicles. Motion detection alerts containing a human and/or vehicle intrusion event are now possible with up to 95% accuracy. Eliminate false alarms, save time and keep stress levels low knowing you're protected.

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.

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.

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.

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Technical Specification

System

Main Processor	Multi-core embedded processor
Operating System	Embedded LINUX, ICR 4.0

Video

Max IP Channels	8 Channels
Throughput	Access: 160 Mbps
	Storage: 160 Mbps
	Forward: 64 Mbps
Video Compression	Smart H.265/H.265/Smart H.264/H.264/MJPEG
Image Resolution	8MP; 6MP; 5MP; 4MP; 3MP; 1080p; 720p; D1
Record Mode	Manual, Schedule (Regular, Motion Detection , Alarm, IVS), Stop
Record Interval	1 ~ 120 min (default: 60 min), Pre-record: 1 ~ 30 sec, Post-record: 10 ~ 300 sec

Audio

Interface	1 Channel Input, 1 Channel Output, RCA
Two-way Talk	Supported
Audio Compression	PCM/G711A/G711U/G726/AAC

Display

Interface	1 × VGA, 1 × HDMI (supports simultaneous video sources output)
Resolution	HDMI: 3840 × 2160; 1920 × 1080; 1280 × 1024; 1280 × 720
	VGA: 1920 × 1080; 1280 × 1024; 1280 × 720
Display Decode	8 × 1080p@30 fps
Display Split	1/4/9
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording

Playback & Backup

Multi-channel Playback	1/4/8
Record Mode	Manual; schedule (general; MD; alarm; MD & alarm; intelligent)
Playback Functions	1. Play; pause; stop; fast forward; fast backward; rewind; play by frame 2. Full screen; backup (cut/file) ; partially enlarge; audio on/off
Backup Mode	USB Device

Alarm

Alarm Input / Output	Input: 4 Channel
	Output: 2 Channel
General Alarm	Motion detection; privacy masking; video loss; PIR alarm; IPC alarm
Anomaly Alarm	Camera offline; storage error; full storage; IP conflict; MAC conflict; login lock; network security anomaly
Intelligent Alarm	Perimeter protection; iMD; people counting; heat map
Alarm Linkage	Record; snapshot; IPC external alarm output; buzzer; log; preset; email

Network

Ethernet	1 RJ-45 Ports (10/100/1000Mbps)
PoE	8 Port
Network Functions	HTTP; HTTPS; TCP/IP; IPv4/IPv6; UPnP; SNMP; RTSP; UDP; SMTP; NTP; DHCP; DNS; IP Filter; DDNS; FTP; Alarm Server; IP Search(Supports IC Realtime IP cameras, DVR, NVS, etc.); P2P; auto register
Smart Phone	Android, iOS, iPhone
Interoperability	ONVIF(profile T/S/G); CGI; SDK
Browser Compatibility	Chrome, IE 9 or later, Edge, Safari, Firefox

Storage

Internal HDD	2 SATA III Ports, Up to 8 TB capacity for each HDD
Disk Group	Supported

Auxiliary Interface

USB	2 (1 × front USB2.0; 1 × back USB2.0)
RS232	N/A
RS485	N/A

General

Power Supply	100 V–240 V, 47 Hz–63 HZ, 3.5 A
Power Consumption	≤ 10W (without HDD)
	Total output power of PoE is 117W, the maximum output power of a single port is 25.5W
Operating Humidity	10%–93% (RH)
Operating Conditions	+10 °F to +131 °F (–10 °C to +55 °C)
Storage Conditions	32 °F to 104 °F (0 °C to +40 °C)
Installation Type	Desktop mount
Dimensions (W×D×H)	1U, 14.76" × 12.89" × 2.12" (375 mm × 327.4 mm × 53.8 mm)
Weight	5.53 lb (2.51 kg) (without HDD)
Gross Weight	8.36 lb (3.79 kg) (without HDD)

Certifications

Certifications	FCC: Part 15 Subpart B, UL Certified

Intelligence

IVS

Capabilities(AI by Recorder)	N/A
Capabilities (AI by Camera)	Tripwire, Intrusion, People Counting, Heat Map

Perimeter Protection

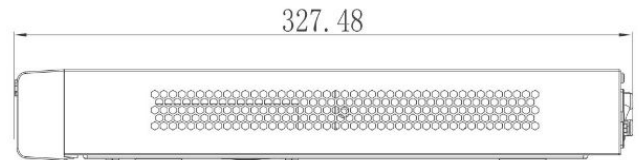|	
Capabilities	Tripwire & intrusion; Recognition of human and vehicle
Performance (AI by Camera)	8 channels
AI Search	Search by target classification (Human, Vehicle)

Intelligent Motion Detect (iMD)

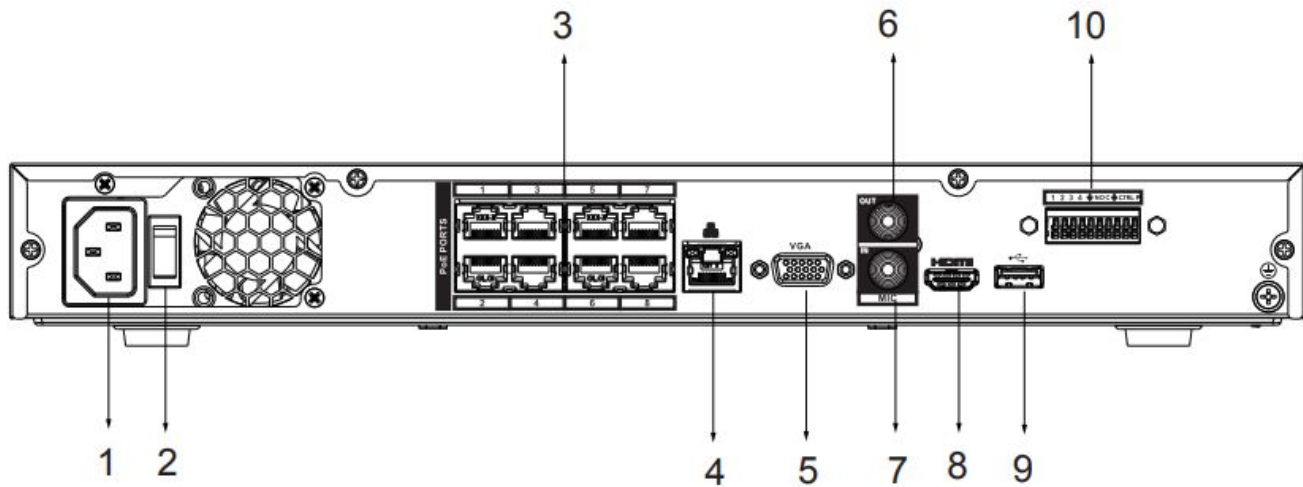|	
Capabilities	Secondary filtering for human and motor vehicle , reducing false alarms caused by leaves, rain and lighting condition change
Performance (AI by Camera)	8 channels
AI Search	Search by target classification (Human, Vehicle)

Face Detection

Capabilities	Gathers **Face attributes:** Gender; age group; glasses; expressions; face mask; beard
Performance (AI by Camera)	4 channels

Dimensions (mm/in)

375mm

53mm

327. 48

Panels

1	Power Input Port	2	Power Switch
3	PoE Ports	4	Network Port
5	VGA Port	6	Mic Out
7	Mic In	8	HDMI Port
9	USB Port	10	Alarm Input/Output