

NVR-EL64-2U12MP1

64 Channel 2U Network Video Recorder



- Multi-core Intel processor
- Max 64 IPC inputs, Max 384Mbps Incoming Bandwidth, H.265/H.264/MJPEG support
- Up to 12MP Resolution for Preview and Playback
- Supports up to 4K Display and dual HDMI output
- Supports IVS, Face Detect, Perimeter Protection and Intelligent Motion Detect (by camera)
- Dual 10/100/1000 Ethernet ports
- 8 SATA III Ports, Up to 10TB capacity for each HDD, RAID 0/1/5/6/10 support
- Made in South Korea and conforms to the Trade Agreements Act (TAA)

System Overview

New in IC Realtime's commercial-grade Elite lineup, the NVR-EL64-2U12MP1 features dual gigabit network ports, 4K resolution dual HDMI output, and up to 12MP camera support in a robust, 2U rack-mountable package. This 64 channel NVR is built to handle high-resolution cameras with up to 80TB of total storage, easily accessible through the front panel.

This NVR also supports IVS and AI IC Realtime cameras with Tripwire, Intrusion, Perimeter Protection and Intelligent Motion Detect and Face Recognition/ detect functions. Other features include ANR support, which recovers lost footage in case of network failure from the IP camera's SD card as well as Fisheye Dewarp and N+M Hot standby with RAID 0/1/5/6/10 support. The NVR is also ONVIF compliant, making it compatible to most third-party IP camera manufacturers.

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Functions

Fisheye Dewarp

The NVR features multiple fisheye dewarping modes to make viewing video easy whether its live or during playback.

Automatic Network Replenishment (ANR)

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.

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 supports optional standard intelligence allowing detection of multiple object behaviors such as abandoned or missing objects. IVS also supports Tripwire analytics, allowing the camera to detect when a predetermined line has been crossed, People Counting, ideal for business intelligence, and Facial Detection, for searching or identification of individuals.

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.

RAID 0/1/5/6/10

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

Technical Specification

System

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

Video

Max IP Channels	64 Channels
Throughput	384Mbps
Video Compression	Smart H.265+/H.265/Smart H.264+/H.264/MJPEG
Image Resolution	12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080P, 1.3MP, 720P
Bit Rate	16Kbps ~ 20Mbps Per Channel
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	MP2/ G726/ G729/ G723/ G711A/ G711U/ PCM

Display

Interface	2 HDMI (Different Source), 1 VGA
Resolution	HDMI: 3840 × 2160 , 1920 × 1080 , 1280 × 1024, 1280 × 720 , 1024 × 768 VGA: 1920 × 1080 , 1280 × 1024, 1280 × 720 , 1024 × 768
Display Decode	64 channels 2 MP Cameras @4Mbps 64 channels 3 MP Cameras @4Mbps 42 channels 6 MP Cameras @6Mbp 42 channels 12 MP Cameras @6Mbps
Display Split	Screen 1: 1/4/8/9/16/25/36/64 Screen 2: 1/4/8/9/16
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording

Playback & Backup

Playback bandwidth	128 Mbps in Raid 5 Mode; 64 Mbps in single HDD Mode
Multi-channel Playback	Up to 16 channels
Record Mode	General, motion detection; intelligent; alarm; POS
Playback Functions	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/eSATA Device

Alarm

Alarm Input / Output	Input: 16 Channel, Low Level Effective, Green Terminal Interface Output: 8 Channel, NO/NC Programmable, Green Terminal Interface
General Alarm	Motion detection; privacy masking; local alarm
Anomaly Alarm	Camera offline; storage error; disk full; IP conflict; MAC conflict; login lock; abnormal behavior of fan; cybersecurity exception
Intelligent Alarm	Face detection; perimeter protection; face recognition; video metadata (human, motor vehicles, and non-motor vehicles); iMD; stereo analysis; crowd distribution; people counting; ANPR
Alarm Linkage	Recording, PTZ, Tour, Alarm Out, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips

Network

Ethernet	2 RJ-45 Ports (10/100/1000Mbps)
PoE	N/A
Network Functions	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search (Supports IC Realtime IP cameras, DVR, NVR, etc.)
Max. User Access	128 Users
Smart Phone	Android, iOS, iPhone
Interoperability	ONVIF 2.4, CGI Conformant
Browser Compatibility	Chrome, IE 9 or later, Edge, Safari, Firefox

Storage

Internal HDD	8 SATA III Ports, Up to 10TB capacity for each HDD
eSATA	1 eSATA
HDD Mode	Single, Raid 0/1/5/6/10(Enterprise-level HDDs are recommended), Support Global HDD Hot-spare
External HDD	iSCSI support

Auxiliary Interface

Front Panel	Supports HDD Hot-swap
USB	4 (2 front USB 2.0 ports, 2 rear USB 3.0 ports)
RS232	1 Port, for PC Communication and Keyboard
RS485	1 Port, for PTZ Control

General

Power Supply	AC100V ~ 240V, 50 ~ 60 Hz
Power Consumption	≤ 20 W (without HDD)
Operating Humidity	10%~93% (RH)
Operating Conditions	+14F ~ +131F (-10C ~ +55C), 86 ~ 106kpa
Storage Conditions	-4F ~ +158F (-20C ~ +70C), 0 ~ 90% RH
Installation Type	Rack mountable
Dimensions (W×D×H)	2U, 17.3" x 17.8" x 3.7" (40mm x 451.08mm x 94.85mm)
Weight	19.8 lb (9kg) (without HDD)
Gross Weight	23.1 lb (10.5kg)

Certifications

Certifications	FCC: Part 15 Subpart B, UL Certified
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Intelligence

IVS

Capabilities(AI by Recorder)	Fisheye Dewarping
Capabilities (AI by Camera)	Tripwire, Intrusion, Abandoned/ Missing Object, Fast Moving, Parking Detection, Crowd Gathering, Loitering Detection

Perimeter Protection

Capabilities	Tripwire & intrusion; Recognition of human and vehicle
Performance (AI by Camera)	24 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)	32 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)	24 channels

Face Recognition

Capabilities	Name, gender, birthday, address, credential type, credential No., countries & regions and state can be added to each face image.
Performance (AI by Camera)	24 channels
Stranger Mode	Detect strangers' faces (not in device's face database).Similarity threshold can be set manually.
AI Search	Similarity threshold can be set for each target face image during search.
Database Management	By camera

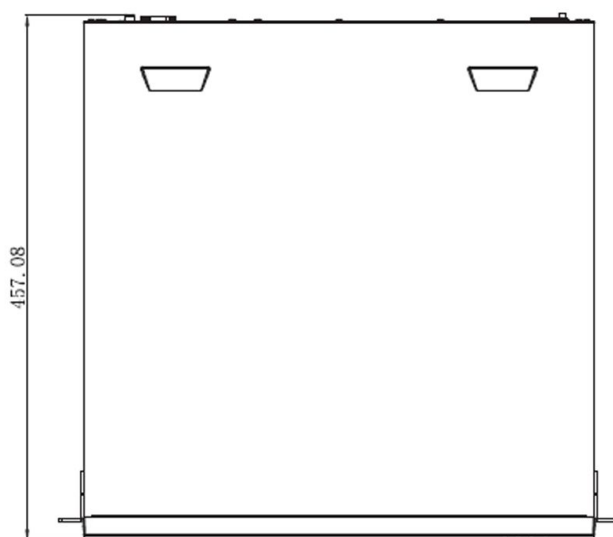
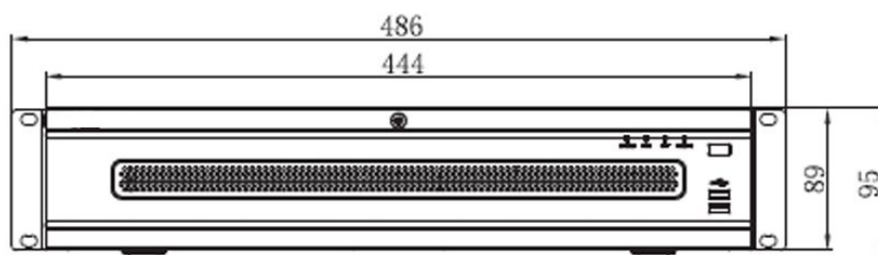
Video Metadata

Capabilities	Gathers Human attributes : Top color, top type, bottom color, bottom type, hat, bag, age, gender and umbrella
	Gathers Motor Vehicle attributes : License plate, plate color, vehicle body, vehicle model, vehicle logo, calling, seatbelt, vehicle interior, vehicle registration location.
	Gathers Non-Motor attributes : Vehicle model, vehicle color, number of persons, helmet.
Performance (AI by Camera)	12 Channels

Vehicle License Plate Comparison

Capabilities	Compares License Plates captured from motor Vehicles
Performance (AI by Camera)	Supported
Database Management	8 channels

Dimensions (mm/in)



Panels

