

# NVR-EL32-2U12MP1

32 Channel 2U Network Video Recorder



- Multi-core embedded processor
- Max 32 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 8TB 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

IC Realtime's NVR-EL32-2U12MP1 features dual gigabit network ports, 4K resolution dual HDMI output and up to 12MP IP camera support in a robust, 2U rack mountable package. This 32 channel NVR is built to handle high resolution cameras with up to 64TB of total storage as well as RAID 0/1/5/6/10 support.

As with our NVRs in the Elite lineup, this recorder also supports IVS with Tripwire, Intrusion, Heat Map and People counting. 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 for storage backup and redundancy. The NVR is also ONVIF compliant, making it compatible to most third party IP camera manufacturers.

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## Functions

### 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.

### 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.

## Fisheye Dewarp

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

## Technical Specification

### System

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

### Video

Max IP Channels	32 Channel
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### Audio

Two-way Talk	1 Channel Input, 1 Channel Output, RCA
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### Display

Interface	2 HDMI (Extra Screen support), 1 VGA
Resolution	3840 × 2160 , 1920 × 1080 , 1280 × 1024, 1280 × 720 , 1024 × 768
Display Split	1st Screen: 1/4/8/9/16/25/36 2nd Screen: 1/4/8/9/16
Decoding Capacity	32 × 3 MP Cameras at 8Mbps
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording

### Intelligence

General IVS	Tripwire and Intrusion, Missing, and Abandon object, Audio Detection (Supported by Camera)
Advanced IVS	Face Detection/ Recognition, Heat Map, People Counting (Supported by Camera)
Perimeter Protection	Tripwire & intrusion (Recognition of human and vehicle) (Supported by camera)
Intelligent Motion Detect	Human/ Vehicle Recognition (Supported by camera)
Fisheye Dewarp	Supported
AI Search	Face Detection/ Recognition, IVS, Human/ Vehicle search

### Recording

Video/Audio Compression	H.265/H.264/MJPEG
Image Resolution	12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080P, 1.3MP, 720P etc.
Record Rate	384Mbps
Bit Rate	16Kbps ~ 20Mbps Per Channel
Record Mode	Manual, Schedule (Regular, MD (Motion Detection), Alarm, IVS), Holiday, Stop
Record Interval	1 ~ 120 min (default: 60 min), Pre-record: 1 ~ 30 sec, Post-record: 10 ~ 300 sec

### Video Detection & 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 Tampering
Alarm Input	16 Channel, Low Level Effective
Alarm Output	8 Channel, NC

### Playback & Backup

Playback Rate	128 Mbps in Raid 5 Mode; 64 Mbps in single HDD Mode
Search Mode	Time /Date, Alarm, MD and Exact Search (accurate to second)
Playback Functions	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/eSATA Device

### Network

Network Interface	2 RJ-45 Ports (10/100/1000Mbps)
Ethernet Port Functions	2 Ethernet Ports Jointly Working or 2 Independent (multi- address)
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
Max. User Access	128 users
Smart Phone	Android, iOS, iPhone
Interoperability	ONVIF 2.4, CGI Conformant

### Storage

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

### Auxiliary Interface

USB	4 USB Ports (2 USB 3.0 , 2 USB 2.0)
RS232	1 Port, for PC Communication and Keyboard
RS485	1 Port, for PTZ Control

### General

Power Supply	AC100V ~ 240V, 50 ~ 60 Hz
Power Consumption	<20W (Without HDD)
Working Environment	+14°F ~ +131°F (-10°C ~ +55°C), 86 ~ 106kpa
Storage Conditions	-4°F ~ +158°F (-20°C ~ +70°C), 0 ~ 90% RH
Installation Type	Rack mountable
Dimensions (WxDxH)	2U, 17.3" x 17.8" x 3.7" (440mm 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
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