

HDVR-EL3200-2U5MP-AI1

32 Ch 5MP Pentabrid 2U Standalone DVR



- H.265+/H.265 dual-stream video compression
- Supports HD-AVS/AHD/TVI/CVBS/IP video inputs
- Supports up to 32 channels of IPC access, each channel up to 8MP input; Max 128 Mbps Incoming Bandwidth
- Perimeter Protection (up to 2 coax channels)
- Intelligent Motion Detect (Up to 16 coax channels)
- Face Recognition (up to 2 coax channels)

System Overview

IC Realtime's HDVR-EL3200-2U5MP-AI1 adopts HD-AVS technology, our in-house technology is an over-coaxial-cable analog HD video transmission standard, allowing long-distance HD transmission at a lower cost to meet the requirements for a complex and large installation. This pentabrid recorder supports up to 32 channels of HD-AVS/AHD/TVI or CVBS inputs (up to 5MP), as well as 36 channel local live-view channels, 16 playback channels as well as H.265/ H.264 support.

This HDVR also has the capability of supporting IP cameras up to 8MP and 32 total IP cameras by disabling all of the AVS inputs.

The recorder features a suite of AI features including: IVS Perimeter Protection, Intelligent Motion Detect (iMD) and Real-Time Face Recognition with database. Its open architecture supports multi-user access & is compatible with ONVIF 2.42 making it compatible with numerous third-party devices.

iMD (Intelligent Motion Detect)

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.

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 detail. 4K resolution improves the clarity of a magnified scene to view or record crisp forensic video from large areas.

High Definition Camera Input

The AVR supports up to 8MP HD AVS cameras and 8MP IP cameras input.

Real-Time Face Recognition

This feature works with live video, historic footage, and snapshots. It allows users to identify facial attributes include gender, age, and expression of emotion. Additional characteristics can be applied such as glasses, mustache, face or mouth mask, and beard. Metadata can also be used to identify these characteristics. Enhanced features allow the user to import new facial images and catalog recorded or live view faces into a database for future alerts. Users are further able to create numerous lists and catalog facial images corresponding to those named lists. This allows for precise notification via email, text and push notifications via SmartICRSS PRO app. (Real-Time Facial Detection gives users the flexibility to analyze target feature while streaming live video or viewing history or snapshots. Importing facial images gives users full functionality and notification by retaining and cataloging faces.)

Technical Specification

System

Main Processor	Embedded Processor
Operating System	Embedded LINUX

Video

IP Video Input	Up to 32 Channels (with all coax disabled), each channel up to 8MP
Analog Video Input	32
AVS Resolution	5MP, 4MP, 1080P@25/30fps, 720P@50/60fps, 720P@25/30fps
AHD Resolution	5MP, 4MP, 1080P@25/30, 720P@25/30fps
TVI Resolution	5MP, 4MP, 1080P@25/30, 720P@25/30fps
CVBS Standard	NTSC/ PAL

Audio

Input	16 channel, BNC
Output	1 channel, BNC
Two-way Talk	1 Mic In, 1 Mic Out, BNC
Audio Compression	G.711A, G.711U, PCM
Audio Sample Rate	8 KHz, 16 bit Per Channel
Audio Bit Rate	64 Kbps Per Channel

Display

Interface	2 HDMI, 1 VGA, 1 TV
Resolution	HDMI 1: HDMI 1:3840×2160, 1920×1080, 1280×1024, 1280×720 HDMI2, VGA: 920×1080, 1280×1024, 1280×720
Display Split	1/4/8/9/16/25/36
Multi Screen	Main + Extra screen (only coax channels are supported on extra screen)
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording

Recording

Video/Audio Compression	AI Coding/H.265+/H.265/H.264+/H.264
Image Resolution	5M-N, 4M-N, 1080P, 1080N, 720P, 960H, D1, CIF
Record Rate	Main Stream: 5M-N (1fps~10fps); 4M-N/1080P (1fps~15fps); 1080N/720P/960H/D1/CIF (1fps~25/30fps) Sub Stream: D1/CIF (1fps~15fps)
Bit Rate	32Kbps~6144Kbps Per Channel
Record Mode	Manual, Schedule (General, Continuous), MD (Video detection: Motion Detection, Video Loss, Tampering), Alarm, Stop
Record Interval	1 ~ 60 min (default: 60 min), Pre-record: 1 ~ 30 sec, Post-record: 10 ~ 300 sec

Video Detection & Alarm

Trigger Events	Recording, PTZ, Tour, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips
Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering and Diagnosis
Alarm Input	16
Relay Output	6

Playback & Backup

Sync Playback	1/4/9/16
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

Network

Ethernet	2 RJ-45 Ports (1000 Mbps)
Network Functions	HTTP, HTTPS, TCP/IP, IPv4/IPv6, Wi-Fi, 3G/4G, SNMP, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, P2P, IP Search
Max. User Access	128 users
Smart Phone	Android, iOS, iPhone
Interoperability	ONVIF 16.12, CGI Conformant

Storage

Internal HDD	8 SATA Port, up to 10TB capacity for each disk
eSATA	1 port

Auxiliary Interface

USB	4 ports (2 USB2.0, 2 USB3.0)
RS232	1 Port, for PC Communication & Keyboard
RS485	1 Port, for PTZ Control

General

Power Supply	AC100V-240V, 50/60Hz
Power Consumption	<22W (Without HDD)
Working Environment	+14°F ~ +131°F (-10°C ~ +55°C), 10~ 90% RH
Storage Conditions	-4°F to +158°F (-20°C to +70°C), 0~90% RH
Dimensions (W×D×H)	17.32" × 18.23" × 3.73" (2U, 440 mm × 463 mm × 95 mm)
Weight	15.3 lb (6.9 kg) (without HDD)
Gross Weight	20.9 lb (9.5 kg)
Installation	Desktop/ Rack mountable

Certifications

Certifications	FCC: Part 15 Subpart B
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AI Features

Perimeter Protection

Capabilities	AI IVS by HDVR: Detection alarm for human and vehicle. Filters misinformation such as leaves and light.
Performance	Up to 2 channels (analog channel only) Up to 10 rules such as area intrusion and tripwire intrusion per channel.
Playback	Search conditions: Search by target classification (Human, Vehicle)

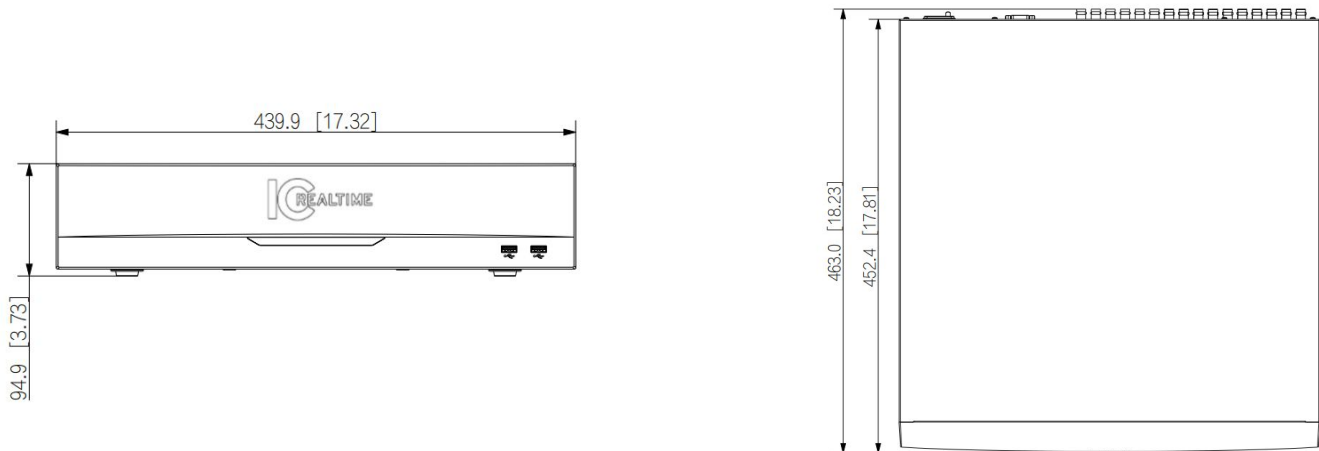
Intelligent Motion Detect (iMD)

Capabilities	AI by DVR: Motion detection alarm for human and vehicle. Filters misinformation such as leaves and light.
Performance	Up to 16 channels (analog channel only) *If Perimeter Protection is enabled on one channel, max 8 channels of iMD.
Playback	Playback: Search by target classification (Human, Vehicle)

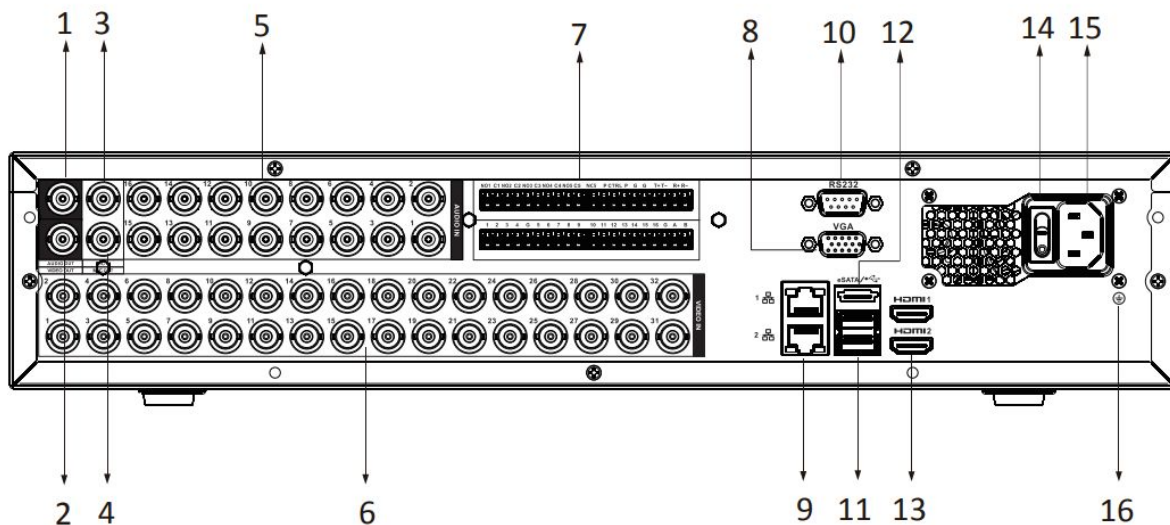
Face Recognition

Capabilities	Up to 12 face pictures/sec processing (modeling and comparing).
Performance	Up to 2 channels video stream (analog channel only) human face recognition. (IVS and iMD must be disabled when Face Recognition/ Detect is enabled)
Stranger Mode	Detect strangers' faces (not in device's face database). Similarity threshold can be set manually.
AI Search	Up to 8 target face images search at same time, similarity threshold can be set for each target face image.
Database Management	Up to 10 face databases with 10,000 face images in total. Name, gender, birthday, and address can be added to each face picture.
Database Application	Each database can be applied to video channels independently
Triggerable Events	Buzzer, Voice Prompts, Email, Snapshot, Recording, Alarm Out, PTZ Activation, etc.

Dimensions (mm/in)



Rear Panel



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|----------------------|-----------------|
| 1 Audio Out | 2 Video Out |
| 3 Mic In | 4 Mic Out |
| 5 Audio In | 6 Video In |
| 7 Alarm Input/Output | 8 VGA Port |
| 9 Network Ports | 10 RS-232 Port |
| 11 USB Ports | 12 eSATA Port |
| 13 HDMI Ports | 14 Power Switch |
| 15 Power Input | 16 Ground |