

HDVR-EL3200-2U5MP-AI2

32 Ch 5MP AVS, Analog, & IP 2U Standalone DVR



- H.265+/H.265 dual-stream video compression
- Supports up to 32 channels of HD-AVS/AHD/TVI/CVBS inputs up to 5MP
- Supports up to 32 channels of IPC access, each channel up to 8MP input
- Max 128Mbps Incoming Bandwidth
- IVS Perimeter Protection (8ch coax)
- Intelligent Motion Detect (16ch coax)
- Real-Time Face Recognition (2ch coax)

System Overview

IC Realtime's HDVR-EL3200-2U5MP-AI2 is a pentabrid recorder that supports up to 32 channels of HD-AVS/AHD/TVI/ CVBS or up to 32 IP camera inputs (if all coax channels are disabled) up to 8MP resolution.

This HDVR also features a suite of AI features including: IVS Perimeter Protection, Intelligent Motion Detect (iMD) as well as Real-Time Face Recognition with database. It supports up to 80TB of HDD storage and is ONVIF 21.12 compliant, making it compatible with numerous third-party devices.

Functions

Perimeter Protection

IC Realtime's Perimeter Protection features significantly improve detection accuracy. The benefits of Perimeter Protection include up to a 90% reduction in false alarms. Other advantages include a decrease in pixel count requirement for object detection, which translates into more efficiency with less strain on the system. Perimeter Protection options let you customize tripwires based on the object type and allow intelligent automation within a limited area of access such as pedestrian or vehicle-only zones. The combination of advanced AI analytics and real-time alerts maximizes efficiency & balance of the total systems capacity and resources resulting in greater surveillance system efficiency.

AI Coding

AI coding uses an advanced algorithm to optimize human and vehicle targets, resulting in a reduced bitrate compared to H.264/H.265 encoding.

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.

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	32 (if all coax channels are disabled), each channel up to 8MP
Analog Video Input	32
Throughput	Incoming bandwidth:128 Mbps, Recording bandwidth:128 Mbps Outgoing bandwidth: 128 Mbps
TV Output	Yes
AVS Resolution	5MP, 4MP, 1080p@25/30 fps, 720p@50/60 fps; 720p@25/30 fps
AHD Resolution	5MP, 4MP, 1080p@25/30 fps; 720p@25/30 fps
TVI Resolution	5MP, 4MP, 1080p@25/30 fps; 720p@25/30 fps
CVBS Standard	PAL/NTSC
Video Compression	AI Coding (16ch)/H.265+/H.265/H.264+/H.264
Image Resolution	4K, 6MP, 5MP, 4K-N, 4MP, 3MP, 1080P, 720P, 960H, D1, CIF
Record Rate	Main stream: 4K (1fps~15fps); 6MP(1fps~20 fps); 5MP(1fps~25fps);4K-N/4MP /3MP/ 1080P/ 720P/960H/D1/CIF (1fps~25/30fps) Sub stream:960H(1fps~15fps); D1/CIF(1fps~25/30fps)
Bit Rate	32 kbps~6144 kbps 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

Audio

Input	16-channel BNC (external) 32-channel BNC (coaxial audio)
Output	1 channel, BNC
Two-way Talk	1 channel, BNC
Audio Compression	G.711a; G.711u; PCM

Display

Interface	2 HDMI, 1 VGA
Resolution	VGA/HDMI2: 1920 × 1080, 1280 × 1024, 1280 × 720 HDMI1: 3840 × 2160, 1920 × 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)
Privacy Masking	4 rectangular zones (each camera)
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording

Playback & Backup

Sync Playback	1/4/9/16
Record Mode	General, motion detection; intelligent; alarm;
Playback Mode	Instant playback, general playback, event playback, tag playback, smart playback (face and motion detection)
Backup Mode	USB Device/Network

Alarm

General Alarm	Motion detection; video loss; tampering; local alarm
Anomaly Alarm	No disk; storage error; disk full; camera offline; IP conflict; MAC conflict
Intelligent Alarm	Face detection; face recognition; perimeter protection
Alarm Linkage	Record; snapshot (panoramic); IPC external alarm output; access controller; voice prompt; buzzer; log; preset; email
Alarm Input / Output	Input: 16 Channels
	Output: 6 Channels

Network

Ethernet	2 (10/100/1000 Mbps Ethernet ports, RJ-45)
Network Mode	Multi-address mode, Fault Tolerance, Load Balance
Network Functions	HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; P2P
Interoperability	ONVIF 21.12, CGI Conformant
Max. User Access	128 users
Smart Phone	Android, iOS

Storage

Internal HDD	8 SATA Ports, up to 10TB capacity for each disk
eSATA	1 (Contact Technical Support for Compatible devices)

Auxiliary Interface

USB	4 (2 front USB 2.0 ports, 2 rear USB 3.0 ports)
RS232	1 port, for PC Communication & Keyboard
RS485	1 Port, for PTZ Control

General

Power Supply	100-240 VAC, 50/60 Hz
Power Consumption	<22W (Without HDD)
Working Environment	14 °F to +131 °F(-10 °C to +55 °C), 10~ 90% RH
Installation	Desktop/ Rack mountable
Dimensions (W×D×H)	2U, 17.32" × 18.23" × 3.73" (439.9 mm × 463.0 mm × 94.9 mm)
Net Weight	15.21 lb (6.9 kg) without HDD
Gross Weight	20.94 lb (9.5 kg)

Certifications

Certifications	FCC: Part 15 Subpart B
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AI Features

Note: HDVR AI functions are coax channel only and will be disabled when IP camera extension is enabled.

Perimeter Protection

Capabilities (AI by Recorder)	Tripwire & intrusion; Recognition of human and vehicle Set up to 10 rules.
Performance	Advanced Model (Increased Accuracy): 2 channels, 10 IVS for each channel General Model: 8 channels, 10 IVS for each channel
AI Search	Search by target classification (Human, Vehicle)

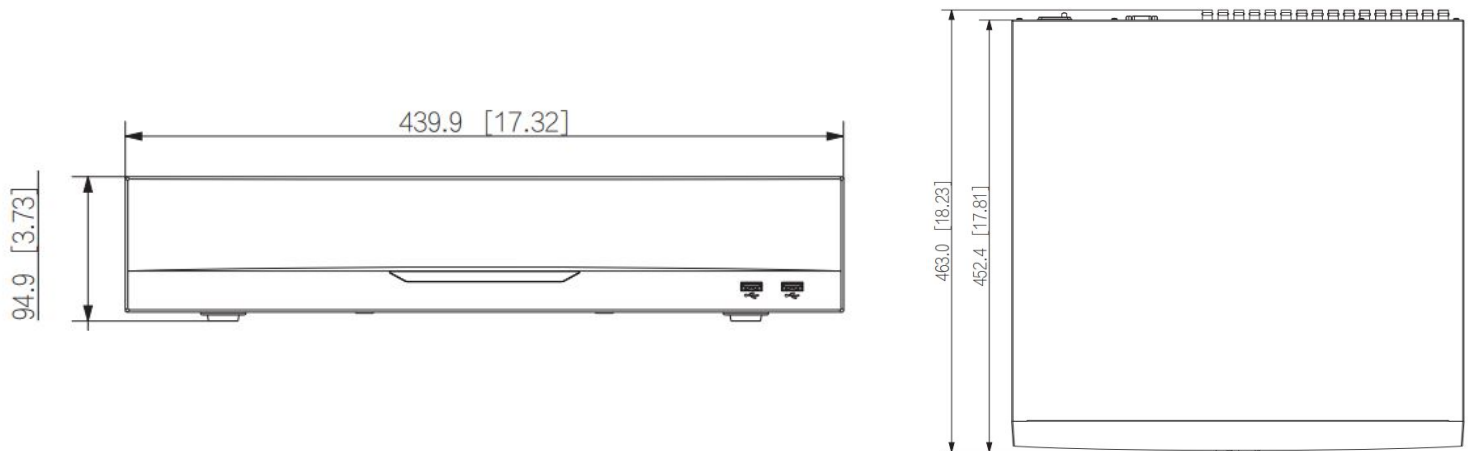
Intelligent Motion Detect (iMD)

Capabilities (AI by Recorder)	Secondary filtering for human and motor vehicle , reducing false alarms caused by leaves, rain and lighting condition change
Performance	Up to 16 channels (coax channel only)
AI Search	Search videos through channels, time and target types.

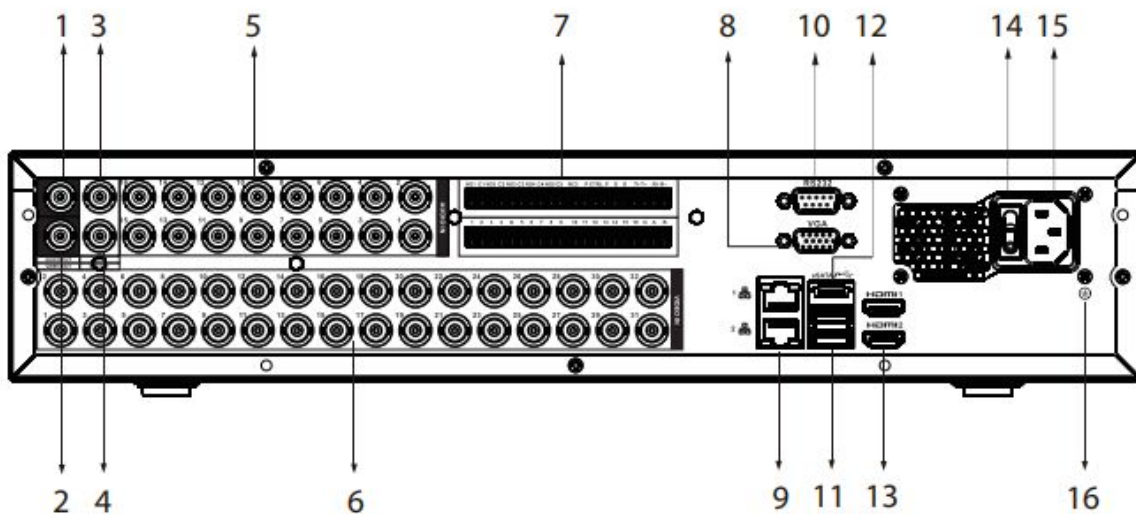
Face Recognition

Capabilities (AI by Recorder)	Up to 12 face pictures/sec processing (modeling and comparing).
Performance	Up to 2 channels support human face recognition (coax channel only) *If enabled, All other AI features will be disabled.
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	Up to 10 face databases with 10,000 face images in total. Name, gender, birthday, address, certificate type, certificate No., countries & regions and state can be added to each face image
Database Application	Each database can be applied to video channels independently

Dimensions (mm/in)



Panels



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|----------------------------|--------------------------|
| 1 AUDIO OUT, BNC Connector | 2 VIDEO OUT |
| 3 MIC IN, BNC Connector | 4 MIC OUT, BNC Connector |
| 5 AUDIO IN, BNC Connector | 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 |