

AVR-1416

16 Channel Pentabrid 1U Hybrid DVR



- H.265+/H.265 dual-stream video compression
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs
- Max 24 channels IP camera inputs, each channel up to 6MP
- Max 96 Mbps Incoming Bandwidth
- Smart Search and Intelligent Video System

System Overview

With the surveillance operators pursuing HD/UHD, which further adds to the storage and transmission cost, HDAVS H.265+/H.265 has been released to decrease the required bitrate while ensuring the video quality in realizing high resolution surveillance such as 4MP/4K. This series is designed for high cost performance and quality. The range offers a great solution for users facing budget constraints who require both quality and performance. This series improves encoding efficiency with the adoption of Smart H.265+/H.265, saving on bandwidth/storage costs, and significantly reducing the Total Cost of Ownership (TCO).

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.

HDAVS/AHD/TVI/CVBS Auto Detect

The AVR can auto-recognize the signal of a camera without any configuration needing to be done. It makes operations friendlier and more convenient.

High Definition Camera Input

The AVR supports up to 5MP HDAVS cameras and 6MP IP cameras input.

Long Distance Transmission

The HDAVS system supports long distance transmission over coaxial cable and UTP, max. 700m for 4K/4MP, 800m for 1080P and 1200m for 720P.

Smart Fan Design

The smart fan can automatically turn on or turn off according to the CPU temperature. This function can effectively reduce the fan noise to provide a better user experience.

Intelligent Video System (IVS)

With built-in intelligent video analytics, the AVR has the ability to detect and analyze moving objects for improved video surveillance. The AVR provides optional standard intelligence at the edge 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.

Technical Specification

System

Main Processor	Embedded Processor
Operating System	Embedded LINUX

Video

IP Video Input	16+8, each channel up to 6MP
Analog Video Input	16 Channel, BNC
Loop Output	N/A
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	PAL/NTSC

Audio

Input	16 channel, BNC
Output	1 channel, RCA
Two-way Talk	Reuse audio in/out, RCA

Display

Interface	1 HDMI, 1 VGA
Resolution	3840×2160, 2560×1440, 1920×1080, 1280×1024, 1280×720
Display Split	When IP extension mode not enabled: 1/4/8/9 When IP extension mode enabled: 1/4/8/9/16
Privacy Masking	4 rectangular zones (each camera)
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording

Recording

Video/Audio Compression	H.265+/H.265/H.264+/H.264
Image Resolution	5M-N, 4M-N, 1080P, 1080N, 720P, 960H, D1, CIF
Record Rate	Main stream: the 1st & 2nd channels 5M-N(1~10fps), other channels 4M-N/1080P(1~15fps); 1080N/720P/960H/ D1/CIF (1~25/30fps) Sub stream: D1/CIF(1~15fps)
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, Postrecord: 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 channel
Relay Output	3 channel

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	1 RJ-45 ports (1000M)
Network Functions	HTTP, HTTPS, TCP/IP, IPv4/IPv6, Wi-Fi, 3G/4G, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, P2P, IP Search (Supports ICR IP cameras, DVR, NVS, etc.)
Max. User Access	128 users
Smart Phone	Android, iOS, iPhone

Storage

Internal HDD	2 SATA Ports, up to 10TB capacity
External HDD	N/A

Auxiliary Interface

USB	1 USB 2.0, 1 USB 3.0
RS232	N/A
RS485	1 Port, for PTZ Control

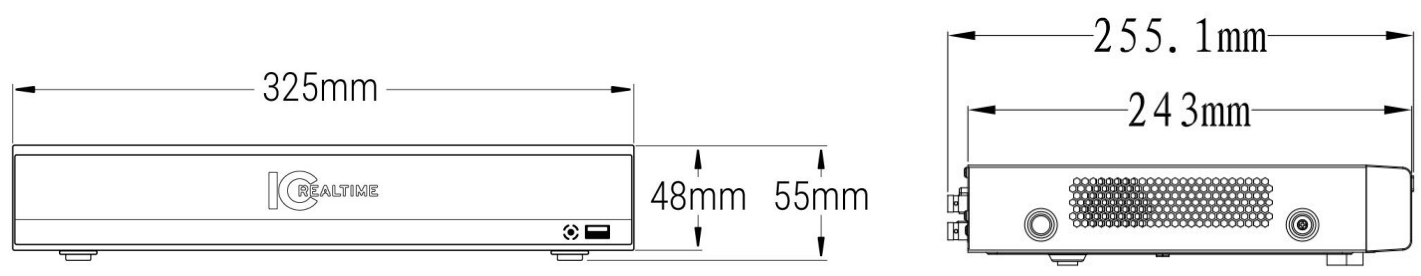
General

Power Supply	DC12V/2A
Power Consumption	<15W
Working Environment	-10°C ~ +55°C (+14°F ~ +131°F), 10~ 90% RH
Dimensions (W×D×H)	Mini 1U, 325mm×255mm×55mm (12.8" x 10" x 2.2")
Weight	2.2kg(4.9 lb)

Certifications

	FCC: Part 15 Subpart B
	CE: CE-LVD: EN 60950-1/IEC 60950-1
Certifications	CE-EMC: EN 61000-3-2, EN 61000-3-3, EN 55032, EN 50130, EN 55024
	UL: UL 60950-1

Dimensions (mm/in)



Panels

