

# FHD5104HS-X1

4 Channel Penta-brid 1080P Compact 1U Digital Video Recorder



- · H.265+/H.265 dual-stream video compression
- · Supports HDCVI/AHD/TVI/CVBS/IP video inputs

 $\cdot$  Max 6 channels IP camera inputs, each channel  $\,$  up to 6MP;

- Max 24Mbps incoming bandwidth
- $\cdot$  Smart Search and Intelligent Video System



## System Overview

With the surveillance operators pursuing to HD/UHD which further adds the storage and transmission cost, HDCVI H.265+/H.265 has been released to incredibly decrease the required bitrate while ensuring the video quality in realizing high resolution surveillance such as 4MP/4K.

The Lite Series is designed for high cost performance and quality. The range offers a great solution for users facing budget constraints who both require quality and performance. And with the adoption of Smart H.265+/H.265, the series improves encoding efficiency, saving on bandwidth/storage costs, and significantly reducing the Total Cost of Ownership (TCO).

## Functions

## Smart H.265+

Smart Codec, H.265+ can reduce up to 90% bit rate and storage requirements compared with H.264 without having to invest in new cameras.

## HDCVI/AHD/TVI/CVBS Auto-detect

The DVR can auto recognize the signal of front-camera without any setting. It makes operation more friendly and convenient.

## High Definition Camera Input

The DVR supports up to 5MP HDCVI camera and 6MP IP camera input.

#### Coaxial Audio/Upgrade/Alarm

The integrated design can reduce wiring troubles which makes it much more cost-effective and convenient for installation.

## POS Functionality

This funcion includes POS ticket information overlay and search which can be widely used in retail programs.

#### Long Distance Transmission

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

#### Intelligent Video System (IVS)

With built-in intelligent video analytics, the DVR has the ability to detect and analyze moving objects for improved video surveillance. The DVR 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.

#### Face Detection

It is a typical technology being used in a variety of applications for searching or identification of individuals.

#### Smart Search

This function helps you get more motion detect video during a short time through drawing a region when playback. It is very useful when an emergency occurs.

# **Technical Specification**

System	
Main Processor	Embedded Processor
Operating System	Embedded LINUX
Video and Audio	
Analog Camera Input	4 Channel, BNC
HDCVI Camera	5MP, 4MP, 1080P@25/30fps, 720P@50/60fps, 720P@25/30fps
AHD Camera	5MP, 4MP, 1080P@25/30, 720P@25/30fps
TVI Camera	5MP, 4MP, 1080P@25/30, 720P@25/30fps
CVBS Camera	PAL/NTSC
IP Camera Input	4+2 Channel, each channel up to 6MP
Audio In/Out	1/1, RCA
Two-way Talk	Reuse audio in/out, RCA
Recording	
Compression	H.265+/H.265/H.264+/H.264
Resolution	5M-N, 4M-N, 1080P, 1080N, 720P, 960H, D1, CIF
Record Rate	Main stream:the 1st channel 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	$1{}^{\sim}60$ min (default: 60 min), Pre-record: $1{}^{\sim}30$ sec, Post-record: $10{}^{\sim}300$ sec
Audio Compression	AAC(only for the 1st channel), G.711A, G.711U, PCM
Audio Sample Rate	8KHz, 16 bit Per Channel
Audio Bit Rate	64Kbps Per Channel
Display	
Interface	1 HDMI ,1 VGA
Resolution	1920×1080, 1280×1024, 1280×720
Multi-screen Display	When IP extension mode not enabled: 1/4 When IP extension mode enabled: 1/4/6
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording
Network	
Interface	1 RJ-45 Port (100M)
Network Function	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 (Supports Dahua IP camera, DVR, NVS, etc.)
Max. User Access	128 users
Smart Phone	iPhone, iPad, Android
Interoperability	ONVIF 16.12, CGI Conformant

# Video Detection and 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	N/A	
Relay Output	N/A	
Playback and Backup		
Playback	1/4	
Search Mode	Time /Date, Alarm, MD and Exact Search (accurate to second)	
Playback Function	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	
Storage		
Internal HDD	1 SATA Port, up to 6TB capacity	
eSATA	N/A	
Auxiliary Interface		
USB	2 USB 2.0	
RS232	N/A	
RS485	1 Port, for PTZ Control	
Electrical		
Power Supply	DC12V/1.5A	
Power Consumption (without HDD)	<10W	
Construction		
Dimensions	Compact 1U, 260×236×48mm(10.2"×9.3"×1.9")	
Device with PFH101 Rack Mount Tray	483mmx281mmx56mm (19.0"x11.1"x2.2")	
Net Weight (without HDD)	0.9kg (2.0 lb)	
Gross Weight	1.6kg (3.5 lb)	
Installation	Desktop installation	
Environmental		
Operating Conditions	-10°C $^{\rm \sim}$ +45°C (+14°F $^{\rm \sim}$ +113°F), up to 55°C/131°F with case fan, 10 $^{\rm \sim}$ 90% RH	
Storage Conditions	-20°C ~ +70°C (-4°F ~ +158°F) , 0~ 90% RH	
Third-party Support		
Third-party Support	Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, CP Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsung, Sanyo, Sony, Videotec, Vivotek, and more	
Certifications		
	FCC: Part 15 Subpart B	
Certifications	CE: CE-LVD: EN 60950-1/IEC 60950-1 CE-EMC: EN 61000-3-2, EN 61000-3-3, EN 55032, EN 50130, EN 55024	