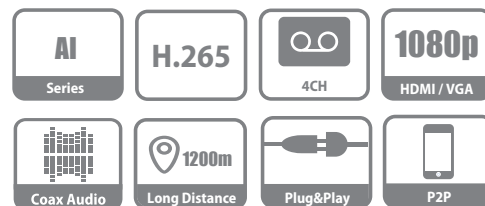


DH-XVR5104H-I

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



- H.265+/H.265 dual-stream video compression
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs
- Max 6 channels IP camera inputs, each channel up to 6MP; Max 24Mbps incoming bandwidth
- Perimeter Protection and SMD Plus



System Overview

Dahua Technology, a world-leading video-centric smart IoT solution and service provider, debuted its new XVR series, XVR5000-I/XVR7000-4KL-I featuring full-channel SMD Plus to benefit customers from AI upgrade. The series are designated to reduce false-alarm rates and human surveillance costs, thus bringing great value to customers in search of products with accurate human/vehicle alarm to raise the security level of various indoor and outdoor facilities.

Renovated from the original SMD technology running on CPU, the new SMD Plus adopts independent AI smart chip loaded with new deep-learning algorithm, enabling the computing power improved by 10 times. As a result, SMD Plus can recognize moving objects and differentiate human and vehicles, so as to effectively avoid false alarms caused by tree branches, insects, shadows, wind or other environmental factors. Meanwhile, users are allowed to select people or vehicles for playback, thus greatly saved target search time.

Functions

Perimeter Protection

Automatically filtering out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improving alarm accuracy.

SMD Plus

SMD Plus, referred to as Smart Motion Detection Plus, which is an upgrading version of SMD that greatly improves the alarm accuracy by loading deep-learning algorithm. It analyzes person and vehicle shapes based on motion detection and send alarms only when person and vehicle intrudes.

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

High Definition Camera Input

The XVR 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.

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.

Smart Search

Extract and classify person and vehicles from massive video data, easy for end users to trace historical informaton and analyze. Person & Vehicle optional for playback to achieve quick target search, saving event retrieval tme.

Technical Specification

System

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|------------------|--------------------|
| Main Processor | Embedded Processor |
| Operating System | Embedded LINUX |

Perimeter Protection

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|----------------------|--|
| Perimeter protection | <ol style="list-style-type: none"> AI by DVR: Detection alarm for human and vehicle. Filter misinformation such as leaves and light. Function configuration: Set at most 10 rules such as area intrusion and tripwire intrusion. Performance: 2 channels |
| Live View | <ol style="list-style-type: none"> Rule box inspection: Configure the rule box and object inspection box. Smart panel: Display object classification (human, vehicle), event types, triggering time, image matting and object types. Attribute is not supported. Counting: Count people in People total. Count motor vehicles in Vehicle. Support exporting of associated event playback before and after 10 seconds. |
| Playback | <ol style="list-style-type: none"> Search conditions: According to channels, time, event types and target types. Functions: Support search of associated event playback or snapshot before and after 10 seconds. Snapshot capacity: 500,000 |

SMD Plus

| | |
|----------|---|
| SMD Plus | <ol style="list-style-type: none"> AI by DVR: Motion detection alarm for human and vehicle. Filter misinformation such as leaves and light. Performance: 4 channels, AI by DVR |
| Preview | Preview: Configure and inspect detection box |
| Playback | <ol style="list-style-type: none"> Playback: Search videos through channels, time and target types. Functions: Support search of associated event playback before and after 10 seconds. |

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

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|-------------------|--|
| Compression | H.265+/H.265/H.264+/H.264 |
| Resolution | 5M-N, 4M-N, 1080P, 1080N, 720P, 960H, D1, CIF |
| Record Rate | Main stream: All channel 5M-N(1~10fps); 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, Post-record: 10 ~ 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

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| 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: 1/4/8 |
| OSD | Camera title, Time, Video loss, Camera lock, Motion detection, Recording |

Network

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|------------------|---|
| 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

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|-----------------|--|
| 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

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|-------------------|---|
| 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

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|--------------|---------------------------------|
| Internal HDD | 1 SATA Port, up to 6TB capacity |
| eSATA | N/A |

Auxiliary Interface

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|-------|-------------------------|
| USB | 2 USB 2.0 |
| RS232 | N/A |
| RS485 | 1 Port, for PTZ Control |

Electrical

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|---------------------------------|------------|
| Power Supply | DC12V/1.5A |
| Power Consumption (Without HDD) | <10W |

Construction

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|--------------------------|--|
| Dimensions | Mini 1U, 325mm×255mm×55mm (12.8" x 10" x 2.2") |
| Net Weight (without HDD) | 1.0kg (2.2lb) |
| Gross Weight | 1.9kg (4.2lb) |
| Installation | Desktop installation |

Environmental

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|----------------------|--|
| Operating Conditions | -10°C ~ +45°C (+14°F ~ +113°F), up to 55°C/131°F with case fan, 10~ 90% RH |
| Storage Conditions | -20°C ~ +70°C (-4°F ~ +158°F), 0~ 90% RH |

Third-party Support

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|---------------------|---|
| Third-party Support | Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, CP Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsung, Sanyo, Sony, Videotec, Vivotek, and more |
|---------------------|---|

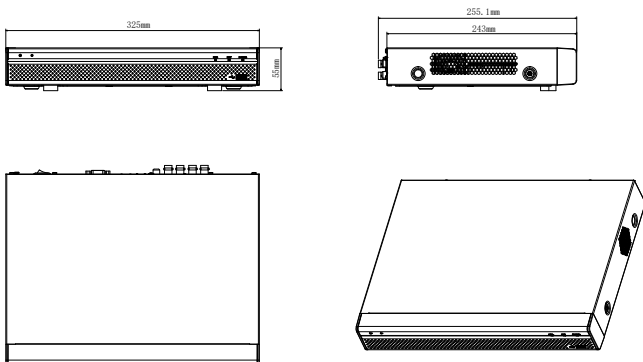
Certifications

| | |
|----------------|--|
| Certifications | FCC: Part 15 Subpart B |
| | 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 |

Ordering Information

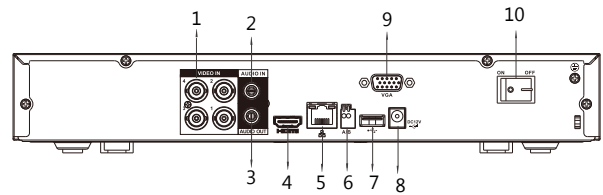
| Type | Part Number | Description |
|---------------|---------------|---|
| 4 Channel XVR | DH-XVR5104H-I | 4 Channel Penta-brid 1080P Mini 1U Digital Video Recorder |

Dimensions (mm)



Rear Panel

DH-XVR5104H-I



- | | | | |
|---|--------------------------|----|--------------------|
| 1 | VIDEO IN | 6 | RS485 Interface |
| 2 | AUDIO IN, RCA Connector | 7 | USB Interface |
| 3 | AUDIO OUT, RCA Connector | 8 | DC 12V Power Input |
| 4 | HDMI Interface | 9 | VGA Interface |
| 5 | Network Interface | 10 | Power Switch |