EXP-4CHN-2BUL-2MP
4CHN 2CAM 2MP Bullet

RECORDER FEATURES:
· H.265+/H.265 dual-stream video compression
· Supports HDCVI/AHD/TVI/CVBS/IP video inputs
· Max 5/10 channels IP camera inputs, each channel up to 2MP/6MP; Max 20/40Mbps Incoming Bandwidth
· Long transmission distance over coax cable
· Supports 1 SATA HDD, up to 6TB

CAMERA FEATURES:
· Max. 30fps@1080P
· HD and SD output switchable
· 2.8mm fixed lens
· Max. IR length 20m, Smart IR
· IP67, DC12V

EXP-4CHN-2BUL-2MP
4CHN 2CAM 2MP Bullet

· Max. 30fps@1080P
· HD and SD output switchable
· 2.8mm fixed lens
· Max. IR length 20m, Smart IR
· IP67, DC12V

IR Series	1080p FULL HD	20m IR	DC 12V	IP67	Temperature

System Overview

Experience 1080P full HD video and the simplicity of using existing cabling infrastructure with HDCVI. The 1080P HDCVI camera features a compact design and offers a high quality image at a friendly price. It offers various vari-focal/fixed lens models with a multi-language OSD and HD/SD switchable output. Its structural flexibility and high cost-performance makes the camera an ideal choice for SMB solutions.

Functions

4 Signals over 1 Coaxial Cable
HDCVI technology supports 4 signals to be transmitted over 1 coaxial cable simultaneously, i.e. video, audio*, data and power. Dual-way data transmission allows the HDCVI camera to interact with the HCVR, such as sending control signal or triggering alarm. Moreover, HDCVI technology supports PoC for construction flexibility.

* Audio input is available for some models of HDCVI cameras.

Long Distance Transmission
HDCVI technology guarantees real-time transmission at l ong distance without any loss. It supports up to 800m(1080P)/1200m(720P) trans-mission via coaxial cable, and up to 300m(1080P)/450m(720P) via UTP cable.*

Simplicity
HDCVI technology inherits the born feature of simplicity from traditional analog surveillance system, making itself a best choice for investment protection. HDCVI system can seamlessly upgrade the traditional ana-log system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

Smart IR
The camera is designed with microcrystalline LED IR illumination for best lowlight performance. Smart IR is a technology to ensure brightness uniformity in B/W image under low illumination. The unique Smart IR adjusts to the intensity of camera's infrared LEDs to compensate for the distance of an object, and prevents IR LEDs from overexposing images as the object come closer to the camera.

Multi-formats
The camera supports multiple video formats including HDCVI, CVBS and other two common HD analog formats in the market. The four formats can be switched over through OSD menu or by PFM820(UTC controller). This feature makes the camera to be compatible with not only HCVRs but also most end users' existing HD/SD DVRs.

Multi-language OSD
OSD menu provides multiple image adjustments and function settings to meet the requirements of different monitoring scenes. The OSD menu includes configurations such as backlight mode, day/night, white balance, privacy mask and motion detect. The camera supports 11 languages for OSD menu, namely, Chinese, English, French, German, Spanish, Portuguese, Italian, Japanese, Korean, Russian and Polish.

Protection
The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 ranking, making it suitable for indoor or outdoor environments.
With working temperature range of -40°C to +60°C (-40°F to +140°F), the camera is designed for extreme temperature environments.
Supporting ±30% input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

EXP-4CHN-2BUL-2MP

Technical Specification

Camera

Image Sensor	1/2.7" CMOS
Effective Pixels	1920(H)×1080(V), 2MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/25~1/100000s NTSC: 1/30~1/100000s
Minimum Illumination	0.04Lux/F1.85, 30IRE, 0Lux IR on
S/N Ratio	More than 65dB
IR Distance	Up to 20m (66feet)
IR On/Off Control	Auto / Manual

Lens

Lens Type	Fixed lens / Fixed iris
Mount Type	Board-in
Focal Length	2.8mm
Max Aperture	F1.85
Angle of View	H: 93° (103°, 54.7°)
Focus Control	N/A
Close Focus Distance	800mm (500mm, 2000mm) 31.50'' (19.69'', 78.74'')

DORI Distance

Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.

	DORI Definition	Distance
Detect	25px/m (8px/ft)	2.8mm: 37m(121ft) 3.6mm: 51m(167ft) 6mm: 80m(262ft)
Observe	63px/m (19px/ft)	2.8mm: 15m(49ft) 3.6mm: 20m(66ft) 6mm: 32m(105ft)
Recognize	125px/m (38px/ft)	2.8mm: 8m(26ft) 3.6mm: 10m(33ft) 6mm: 16m(52ft)
Identify	250ppm (76px/ft)	2.8mm: 4m(14ft) 3.6mm: 5m(17ft) 6mm: 8m(26ft)

Pan / Tilt / Rotation

Pan/Tilt/Rotation	Pan: 0° ~ 360° Tilt: 0° ~ 90° Rotation: 0° ~ 360°

Video

Resolution	1080P (1920×1080)
Frame Rate	25/30fps@1080P, 25/30/50/60fps@720P
Video Output	1-channel BNC high definition video output / CVBS video output (Can switch)

Day/Night	Auto (ICR) / Manual
OSD Menu	Multi-language
BLC Mode	BLC / HLC / DWDR
WDR	DWDR
Gain Control	AGC
Noise Reduction	2D
White Balance	Auto / Manual
Smart IR	Auto / Manual

Certifications

Certifications	CE (EN55032, EN55024, EN50130-4) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014)

Interface

Audio Interface	N/A

Electrical

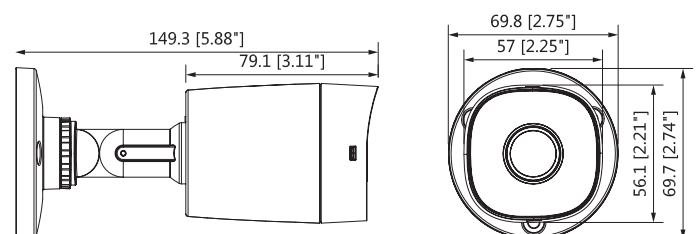|	
Power Supply	12V DC ±30%
Power Consumption	Max. 2.7W (12V DC, IR on)

Environmental

Operating Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH * Start up should be done at above-40°C (-40°F)
Storage Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH
Ingress Protection & Vandal Resistance	IP67

Construction

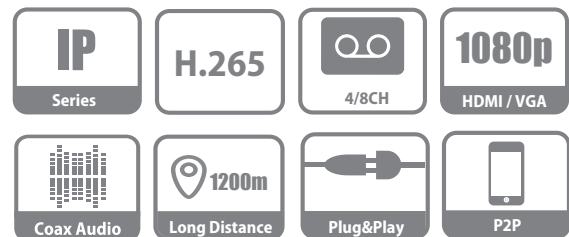|	
Casing	Plastic
Dimensions	70mm×70mm×149mm (2.76"×2.76"×5.87")
Net Weight	0.14kg (0.31lb)
Gross Weight	0.17kg (0.37lb)

Dimensions (mm/inch)

EXP-4CHN-2BUL-2MP
4CHN 2CAM 2MP Bullet

· H.265+/H.265 dual-stream video compression

· Supports HDCVI/AHD/TVI/CVBS/IP video inputs

· Max 5/10 channels IP camera inputs, each channel up to
  2MP/6MP; Max 20/40Mbps Incoming Bandwidth

· Long transmission distance over coax cable

· Supports 1 SATA HDD, up to 6TB

IP Series	H.265	4/8CH	1080p HDMI / VGA
Coax Audio	1200m Long Distance	Plug&Play	P2P

System Overview

Designed as a full compatibility product, this unit is able
to provide end user the simplicity of analog system, namely lower system cost, simple installation and use of existing cable. And with the adoption of Smart H.265+/H.265, the series improves encoding efficiency, saving on bandwidth/storage costs. It is ideal for a wide range of civil applications such as retail store, home protection and so on.

Featuring high performance with attractive costs, this system offers a great solution for users facing budget constraints who both require quality and performance.

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/IP Auto-detect
The unit can auto recognize the signal of front-camera without any setting. It makes operation more friendly and convenient.

IPC Input Supported
The unit supports up to 2MP IPC input, and up to 6MP IPC 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. 800m for 1080P and 1200m for 720P.

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.

Perfect Image Quality
High performance chip provides perfect image quality with better color reproduction.

P2P
Monitor at anytime and anywhere. Easily and conveniently mange the device.

Onvif

EXP-4CHN-2BUL-2MP

Technical Specification

System

Main Processor	Embedded Processor
Operating System	Embedded LINUX

Video and Audio

Analog Camera Input	4/8 Channel, BNC
HDCVI Camera	4CH: 1080P@25/30fps, 720P@50/60fps, 720P@25/30fps 8CH: 1080P@25/30fps, 720P@25/30fps
AHD Camera	1080P@25/30, 720P@25/30fps
TVI Camera	1080P@25/30, 720P@25/30fps
CVBS Camera	PAL/NTSC
IP Camera Input	4CH: 4+1, each channel up to 2MP 8CH: 8+2, each channel up to 6MP
Audio In/Out	1/1, RCA
Two-way Talk	Reuse audio in/out, RCA

Recording

Video Compression	H.265+/H.265/H.264+/H.264
Resolution	1080N, 720P, 960H, D1, HD1, BCIF, CIF, QCIF
Record Rate	Main Stream: 4CH: All channels 1080N/720P/960H/D1/HD1/BCIF/CIF/QCIF(1~25/30fps) 8CH: the 1st channel 1080N/720P(1~25/30fps), others 1080N/720P(1~15fps); 960H/D1/HD1/BCIF/CIF/QCIF(1~25/30fps) Sub stream: 4CH: CIF/QCIF (1~15fps) 8CH: CIF/QCIF (1~7fps)
Video Bit Rate	32Kbps ~ 4096Kbps 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

Interface	1 HDMI ,1 VGA
Resolution	1920×1080, 1280×1024, 1280×720
Multi-screen Display	When IP extension mode not enabled: 4CH: 1/4 8CH: 1/4/8/9 When IP extension mode enabled: 4CH: 1/4/6 8CH: 1/4/8/9/16
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, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter ,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	4CH: 1/4 8CH: 1/4/9
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	N/A

Electrical

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

Construction

Dimensions	Cooper 1U, 197mm×192mm×41mm (7.8"×7.6"×1.6")
Net Weight (without HDD)	0.54kg (1.19lb) 0.56kg (1.23lb)
Gross Weight	0.93kg (2.05lb)
Installation	Desktop installation

Environmental

Operating Conditions	-10°C ~ +45°C (+14°F ~ +113°F), 10~ 90% RH
Storage Conditions	-20°C ~ +70°C (-4°F ~ +158°F) , 0~ 90% RH

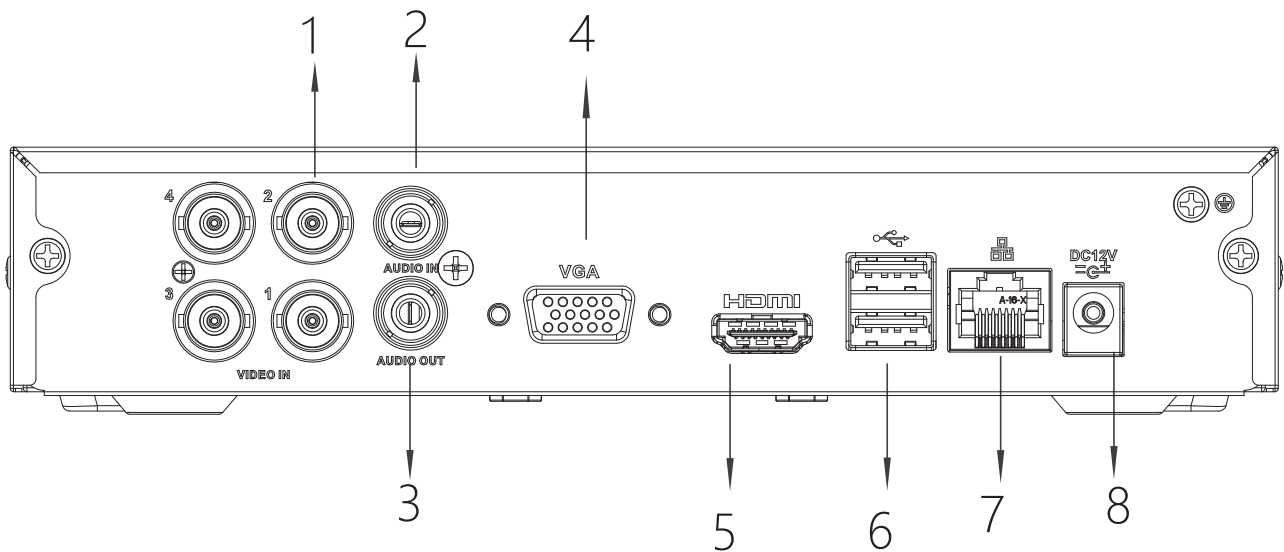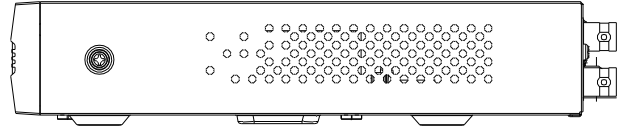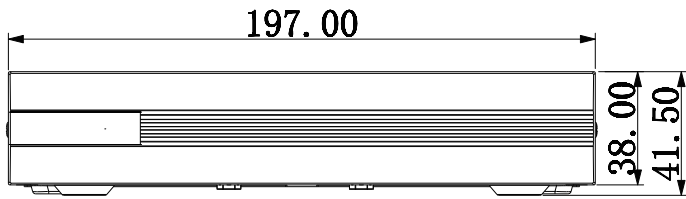### Third-party Support

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

Certifications

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
	UL: UL 60950-1

EXP-4CHN-2BUL-2MP

Dimensions (mm)

197.00

38.00
41.50

1   2   4

4   2

AUDIO IN   VGA

3   1

VIDEO IN   AUDIO OUT

HDMI

DC12V

3

5   6   7   8

Rear Panel

1	VIDEO IN	5	HDMI Interface
2	AUDIO IN, RCA Connector	6	USB Interface
3	AUDIO OUT, RCA Connector	7	Network Interface
4	VGA Interface	8	DC12V Power Input