

4-channel HDCVI Recorder Kit

Four HDCVI IR Dome Cameras and One Penta-brid 1080p HDCVI DVR

HDCVI



HDCVI Camera

- 1080p at 30 fps Maximum Resolution
- 2.8 mm Fixed Lens
- Maximum IR Length 30 m (98 ft) with Smart IR
- IP67 Environmental Protection and IK10 Vandal Resistance

HDCVI DVR

- Embedded Processor
- Offers 720p (real-time) and 1080p (15 fps) Recording
- Four (4) HDCVI/AHD/TVI/CVBS Channels
- 24 Mbps Incoming Bandwidth

System Overview

The Dahua Recorder kits provide all the components to quickly install, configure, and employ a complete video surveillance solution. The HDCVI cameras offer the clarity of Full HD 1080p video, and the HDCVI DVR offers built-in motion detection algorithms, alarm triggers, and customized recording modes. The kit features Dahua's HDCVI technology that leverages an existing coaxial infrastructure, saving time and costs from running networking and power cables.

Functions

Long Distance Transmission

HDCVI technology guarantees real-time transmission over long distances without loss of video quality. HDCVI cameras provide the same resolution as most IP network camera systems using existing RG-59, RG-6, or CAT 6 UTP cabling.

Simplicity

HDCVI technology seamlessly integrates traditional analog surveillance systems with upgraded, high-quality HD video, making it the best choice to protect security investments. The plug and play approach enables full HD video surveillance without the hassles of configuring a network.

Flexible Recording

The HDCVI DVR offers a variety of configurable recording options and schedules that saves HDD space and active monitoring time. The HDCVI DVR monitors incoming video and can be programmed to record if motion is detected or if an alarm is triggered. The HDCVI DVR can also be programmed to record on a schedule or at different intervals. The recording options and schedules can be set for each individual camera or copied to all cameras.

Smart IR

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 30 m (98 ft).

Camera Protection

The HDCVI camera complies with the IK10 Vandal Resistance impact rating making it capable of withstanding the equivalent of 55 kg (120 lbs) of force. Subjected to rigorous dust and water immersion tests and certified to the IP67 Ingress Protection rating makes it suitable for demanding outdoor applications.

Environmental

The HDCVI cameras operate in extreme temperature environments, rated for use in temperatures from -40° C to +60° C (-40° F to +140° F), allowing the camera to operate in the harshest environments.

The HDCVI DVR features an operating temperature of -10° C to +55° C (+14° F to +131° F).

Technical Specification - HDCVI Cameras

Camera

Image Sensor	1/2.9-in. CMOS
Effective Pixels	1920(H) x 1280(V), 2 MP
Scanning System	Progressive
Electronic Shutter Speed	1/30 s to 1/100000 s
Minimum Illumination	Color: 0.02 Lux at F2.0 0 Lux (with IR on)
S/N Ratio	More than 65 dB
IR Distance	Up to 30 m (98 ft)
IR On/Off Control	Auto, Manual
IR LEDs	12

Lens

Lens Type	Fixed Lens / Fixed Iris
Mount Type	Board-in
Focal Length	2.8 mm
Max Aperture	F2.0
Angle of View	106°
Close Focus Distance	500 mm (19.7 in.)

Pan / Tilt / Rotation

Range	Pan: 0° to 355° Tilt: 0° to 65° Rotation: 0° to 355°
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Video

Resolution	1080p (1920 x 1080)	
Frame Rate	1080p at 30 fps 720p at 30/60 fps	
Video Output	One (1) BNC HDCVI High-definition Channel or One (1) BNC CVBS, AHD or TVI Channel, switchable	
Video Transmission ¹	RG-59/U Coax	720p: 800 m (2624.67 ft) 1080p: 500 m (1640.42 ft)
	RG-6/U Coax	720p: 1200 m (3937.01 ft) 1080p: 800 m (2624.67 ft)
	CAT 6 UTP (balun required)	720p: 450 m (1476.38 ft) 1080p: 300 m (984.25 ft)
Day/Night	Auto (ICR), Manual	
OSD Menu	Multi-language	
BLC Mode	BLC, HLC, DWDR	
WDR	Digital WDR	
Gain Control	AGC	
Noise Reduction	2D	
White Balance	Auto, Manual	
Smart IR	Auto, Manual	

Certifications

Safety	EN55032, EN55024, EN50130-4 UL60950-1+CAN/CSA C22.2 No.60950-1
Electromagnetic Compatibility (EMC)	FCC CFR 47 FCC Part 15 Subpart B ANSI C63.4-2014

Electrical

Power Supply	12 VDC ±25%
Power Consumption	Max 2.6 W (12 VDC with IR on)

Environmental

Operating Conditions	-40° C to +60° C (-40° F to +140° F), Less than 95% RH Initiate startup above -40° C (-40° F)
Storage Conditions	-40° C to +60° C (-40° F to +140° F), Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

Construction

Casing	Aluminium
Dimensions	ø109.90 mm × 81.0 mm (ø4.33 in. x 3.19 in.)
Net Weight	0.31 kg (0.68 lb)
Gross Weight	0.41 kg (0.90 lb)

1. Transmission distance results verified by real-scene testing in Dahua's test laboratory. Actual transmission distances may vary due to external influences, cable quality, and wiring structures.

Technical Specification - HDCVI DVR

System

Main Processor	Embedded Processor
Operating System	Embedded LINUX

Display

Interface	One (1) HDMI One (1) VGA
Resolution	1920 × 1080, 1280 × 1024, 1280 × 720, 1024 × 768
Multi-screen Display	1/4/6
On-screen Display Options	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, and Recording

Video Detection and Alarm

Trigger Events	Recording, PTZ, Tour, Alarm Out, 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	Eight (8)
Relay Output	Three (3)

Playback and Backup

Playback	1/4
Search Mode	Time / Date, Alarm, Motion Detection, and Exact Search (accurate to 1 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, and Digital Zoom
Backup Mode	USB Device, Network

Storage

Internal HDD	One (1) SATA Port Unit ships with a pre-installed 2 TB HDD
HDD Mode	Single

Auxiliary Interface

USB	Two (2) USB 2.0 Ports
RS485	One (1) Port, for PTZ Control

Third-party Support

Third-party Support	Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, CP Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsung, Sanyo, Sony, Videotec, Vivotec, and others
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Audio and Video

Analog Inputs	Four (4) Channels
IP Inputs	4 + 2 Channels
Resolution	Analog: 1080p IP: Up to 5 MP per Channel
Audio Connections	Inputs: Four (4) Channels Output: One (1) Channel
Two-way Talk	Reuse Audio In (channel 1) / out, RCA

Recording

Compression	Smart H.264+, H.264
Resolution	1080p, 720p, 960H, D1, HD1, BCIF, CIF, QCIF
Record Rate	
Main Stream	1080p at 1 to 15 fps or 1080N, 720p, 960H, D1, HD1, BCIF, CIF, QCIF at 1 to 30 fps
Sub Stream	D1, CIF, QCIF at 1 to 30 fps
Bit Rate	1 Kbps to 6144 Kbps per channel
Record Mode	Manual, Schedule (Regular, Continuous), Motion Detection (Video Detection: Motion Detection, Video Loss, Tampering), Alarm, Stop
Record Interval	1 to 60 minutes (default: 60 minutes) Pre-record: 1 s to 30 s Post-record: 10 s to 300 s

Network

Interface	One (1) RJ-45 Port (100 M)
Network Function	HTTP, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, P2P, IP Search (Supports Dahua IP cameras, DVRs, NVS)
Max. User Access	128 users
Mobile Operating System	iOS and Android
Interoperability	ONVIF 2.4.1, CGI Conformant

Electrical

Power Supply	12 VDC, 2 A
Power Consumption	< 10 W, without HDD

Environmental

Operating Conditions	-10° C to +55° C (+14 °F to +131 °F), 86 to 106 kpa
Storage Conditions	0° C to +50° C (+32 °F to +122 °F), 0 to 90% RH

Construction

Dimensions	Mini 1U, 325.0 mm × 255.10 mm × 55.0 mm (12.80 in. x 10.0 in. x 2.20 in.)
Net Weight	1.50 kg (3.30 lbs), without HDD
Gross Weight	2.0 kg (4.40 lbs)
Installation	Desktop installation

Certifications

Safety	Conforms to UL Standard
Electromagnetic Compatibility (EMC)	FCC Part 15 Subpart B ANSI C63.4 – 2014 ICES 003

Intelligence (available on 1 IP channel)

IVS triggers an alarm and takes a defined action for the following events:

Standard Features	<ul style="list-style-type: none"> Tampering with the camera. Error writing to an onboard Micro SD card. Error sending or receiving data over the network. Unauthorized access to the camera.
Premium Features	
Motion	An object moves through any part of the scene.
Tripwire	A target crosses a user-defined line.
Intrusion	A target enters or exits a defined perimeter.
Scene Change	A person or object moves the camera to change the scene or covers the camera to obscure the scene.
Abandoned/Missing Object	A target leaves an object in designated area, or a target removes an object from the same designated area.

Ordering Information

Type	Part Number	Description
4-channel HDCVI Recorder Kit	BC541E42	<ul style="list-style-type: none"> • 4 x 2 MP HDCVI IR Dome Cameras • 1 x 1080p HDCVI DVR, 2 TB
Camera Accessories, Optional	PFA136	Junction box (For use alone)
	PFB203W	Wall mount (For use alone or with PFA152 pole mount)
	PFA152	Pole mount (For use with PFB203W wall mount)
	PFM820	UTC Controller

Accessories

Optional:



PFA136
Junction box



PFB203W
Wall mount

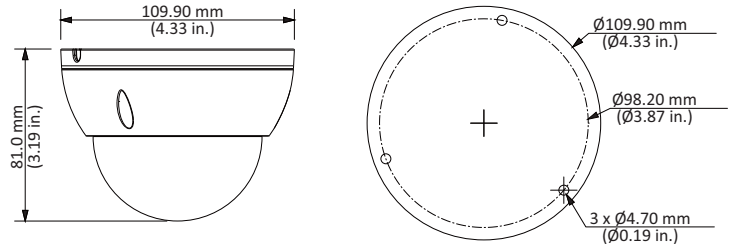


PFA152
Pole mount

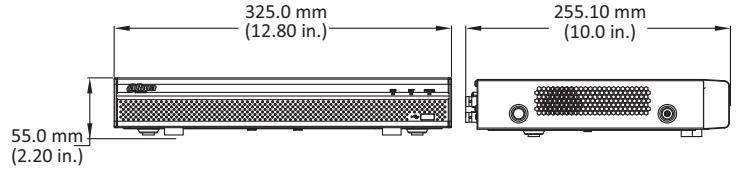


PFM820
UTC Controller

Dimensions (mm/in.) - HDCVI Camera



Dimensions (mm/in.) - HDCVI DVR



Junction Mount	Pole Mount
PFA136	PFB203W + PFA152
Wall Mount	
PFB203W	