Dahua TECHNOLOGY

4 MP PTZ HDCVI Camera
30x IR PTZ HDCVI Camera

- 1/3-in. 4 MP Progressive-scan CMOS Sensor
- Powerful 30x Optical Zoom
- True WDR (120 dB), 3D DNR
- 4 MP or 3 MP at 30 fps, 1080p at 30/60 fps
- Defog Feature for Improved Images in Low-contrast Interference
- Compass Direction Display for Easier Positioning
- Maximum IR Distance up to 100 m (328 ft)
- IP66 Ingress Protection
- Designed for Extreme Temperature Environments
- Five-year Warranty

WDR | ICR D/N | IP66

System Overview

The 4 MP IR PTZ HDCVI Dome camera features a 1/3-in. CMOS imager with a 30x optical zoom lens, and provides an all in one solution for capturing long-distance video surveillance for outdoor applications. The camera features 120 dB True WDR, suitable for applications with complex dynamic range, ensuring both the bright and dark areas are seen clearly. The camera is also equipped with quick and accurate pan/tilt/zoom control for excellent camera control.

Functions

Three Signals over One Coaxial Cable
HDCVI technology simultaneously transmits three signals (video, audio, and control) over a single coaxial cable. Dual-way data transmission allows the HDCVI camera to communicate with an HCVR to send control signals or to trigger alarms. Moreover, HDCVI technology supports PoC for construction flexibility.

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.

Dual Video Output Signals
The camera offers one (1) BNC video output connection to transmit an HDCVI or a CVBS signal. These output signals allow the camera to integrate with various devices, including analog matrix systems and monitors.

True Wide Dynamic Range
The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, True WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

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.

Defog
Utilizing Dahua's advanced algorithm technology, the Defog feature dynamically adjusts the camera's contrast settings to provide improved image quality in scenes affected by fog, smog, mist, smoke or other low-contrast interference.

Environmental
With a built-in heater and a temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments. Subjected and certified to rigorous dust and water immersion tests, the IP66 rating makes it suitable for demanding outdoor applications.

Protection
This camera suits even the harsh conditions for outdoor applications. Its 6KV lightning rating provides protection against the camera and its structure from the effects of lightning.

ONVIF PSIA

Technical Specification

Camera

Image Sensor	1/3-in. CMOS Sensor
Effective Pixels	2592(H) x 1520(V), 4 MP
Scanning System	Progressive
Electronic Shutter Speed	1/3 s to 1/300,000 s
Minimum Illumination	Color: 0.05 lux at F1.6 0 lux at F1.6 with IR on
S/N Ratio	More than 55 dB
IR Distance	Distance up to 100 m (328.08 ft)
IR On/Off Control	Auto, Manual
IR LEDs	Six (6)

Lens

Focal Length	4.5 mm to 135 mm
Maximum Aperture	F1.6 to F4.4
Horizontal Angle of View	60° to 2.2°
Optical Zoom	30x
Focus Control	Auto, Manual
Close Focus Distance	100 mm to 1000 mm (3.94 in. to 39.37 in.)

DORI Distance[1]

Detect (8 ppf)	Observe (19 ppf)	Recognize (38 ppf)	Identify (76 ppf)
2700 m (8858 ft)	1080 m (3543 ft)	540 m (1772 ft)	270 m (886 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 360° endless Tilt: -15° to 90° Auto Flip 180°
Manual Control Speed	Pan: 0.1° to 160° /s Tilt: 0.1° to 120° /s
Preset Speed	Pan: 240° /s Tilt: 200° /s
Presets	300
PTZ Mode	5 Pattern, 8 Tour, Auto Pan, Auto Scan
Speed Setup	Human-oriented Focal Length and Speed Adaptation
Power up Action	Auto restore to previous PTZ and lens status after power failure
Idle Motion	Activate Preset, Scan, Tour, Pattern if there is no command in the specified period
Protocol	DH-SD, Pelco-P/D (Auto recognition)

Video

Resolution	4 MP (2560 x 1440), 1080p (1920 x 1080), 720p (1280 x 720), 960H (960 x 480)	
Frame Rate	4 MP or 3 MP at 30 fps; 1080p at 30/60 fps	
Video Output	HDCVI: 4 MP AHD or TVI: 2 MP CVBS: 960H	
Transmission Distance[2]	RG-59/U Coax	720p: 500 m (1640.42 ft) 1080p: 400 m (1312.34 ft) 4 MP: 300 m (984.25 ft)
	RG-6/U Coax	720p: 800 m (2624.67 ft) 1080p: 600 m (1968.50 ft) 4 MP: 600 m (1968.50 ft)
	CAT 6 UTP (balun required)	720p: 380 m (1246.72 ft) 1080p: 380 m (1246.72 ft) 4 MP: 200 m (656.17 ft)
Day/Night	Auto (ICR), Color, B/W	
OSD Menu	Support	
Advanced Features	Defog, Compass Overlay	
Backlight Compensation	BLC, HLC, True WDR (120 dB)	
White Balance	Auto, ATW, Indoor, Outdoor, Manual	
Gain Control	Auto, Manual	
Noise Reduction	Ultra DNR (2D/3D)	
Digital Zoom	16x	
Flip	180°	
Privacy Masking	Up to 24 areas	

Certifications

CE	EN 55032 EN 55024 EN 50130-4
UL	UL60950-1 + CAN/CSA C22.2, No.60950-1
Electromagnetic Compatibility (EMC)	FCC Part 15 Subpart B ANSI C63.4-2014

Interface

Video Output	One (1) Channel HDCVI or CVBS, BNC
Audio Input	One (1) Channel
RS485	One (1)
Alarm	Input: Two (2) Channels Output: One (1) Channel

Electrical

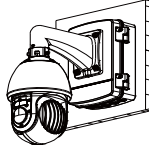|	
Power Supply	24 VAC, 3 A (± 10%)
Power Consumption	13 W, 23 W with IR on

Environmental
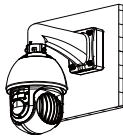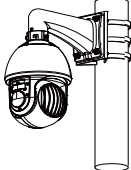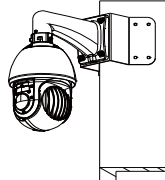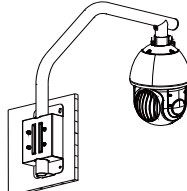
Operating Conditions	-40° C to 60° C (-40° F to +140° F), with built-in heater Less than 90% RH
Ingress Protection	IP66

Construction

Casing	Metal
Dimensions	ø204.70 mm x 359.90 mm (ø8.06 in. x 14.17 in.)
Net Weight	7.80 kg (17.20 lb)
Gross Weight	8.30 kg (18.30 lb)

1. The DORI distance is a measure of the general proximity for a specific classification to help pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specifications and lab test results according to EN 62676-4, the standard that defines the criteria for the Detect, Observe, Recognize and Identify classifications.

2. 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.

Ordering Information

Type	Part Number	Description
4 MP PTZ Camera	6C430IC	4 MP 30x IR PTZ HDCVI Camera, Built-in Heater, True WDR
Accessories, Included	AC24V/3A	Power Supply
	64FB	Wall Mount
Accessories, Optional	PFA114	Mount Adapter Required for use with PFB300C, PFB303S, PFB303W, and with custom third-party mounts.
	PFA120	Junction Box
	PFA140	Power Box
	PFA150	Pole Mount
	PFA151	Corner Mount
	PFB300C	Ceiling Mount
	PFB303S	Parapet Mount
	PFB303W	Wall Mount

Ceiling Mount	Junction Mount
PFA114 + PFB300C	PFA114 + PFB303W + PFA120

Power Box Mount	Pole Mount
PFA114 + PFB303W + PFA140	PFA114 + PFB303W + PFA150

Corner Mount	Parapet Mount
PFA114 + PFB303W + PFA151	PFA114+ PFB303S

Accessories

Included:

64FB
Wall Mount

AC24V/3A
Power Supply

Optional

PFA114
Mount Adapter

PFB303W
Wall Mount

PFA140
Power box

PFB300C
Ceiling Mount

PFA120
Junction Box

PFA150
Pole Mount

PFA151
Corner Mount

PFB303S
Parapet Mount

Dimensions (mm/in.)

ø204.70 mm
(ø8.06 in.)

9.20 mm
(1.02 in.)

359.90 mm
(14.17 in.)