

# DH-SD50131I-HC

1MP 31x Starlight PTZ HDCVI Camera



- 1/2.8" STARVIS™ CMOS
- Powerful 31x optical zoom
- Starlight technology
- 120dB true WDR, 3D DNR
- Max. 25/30/50/60fps@720P
- IP67, IK10



## System Overview

Featuring with powerful optical zoom and accurate pan/tilt/zoom performance, the SD50 series PTZ camera can provide large monitoring range and great detail. The camera delivers 720P resolution at 50/60 fps, with 31x optical zoom, and has very excellent low light performance due to adopting the latest starlight technology. SD50 series PTZ is equipped with quick and smooth control, high quality image and good protection, which make it can meet most of the requirements of video surveillance applications.

## Functions

### 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 analog system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

### Starlight Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.005 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

### 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.

### Environmental

With a temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments. The camera complies to an IK10 impact rating. Subjected and certified to rigorous dust and water immersion tests, the IP67 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.

## Technical Specification

### Camera

Image Sensor	1/2.8" STARVIS™ CMOS
Effective Pixels	1280(H) x 720(V), 1 Megapixels
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/3s~1/30,000s NTSC: 1/4s~1/30,000s
Minimum Illumination	Color: 0.005Lux@F1.6; B/W: 0.0005Lux@F1.6
S/N Ratio	More than 55dB
IR Distance	N/A
IR On/Off Control	N/A
IR LEDs	N/A

### Lens

Focal Length	4.8mm~150mm
Max. Aperture	F1.6 ~ F4.4
Angle of View	H: 58.3° ~ 1.9°
Optical Zoom	31x
Focus Control	Auto/Manual
Close Focus Distance	100mm~ 1000mm

### 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.

Detect	Observe	Recognize	Identify
1613m(5292ft)	646m(2119ft)	323m(1060ft)	161m(528ft)

### PTZ

Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: 0° ~ 90°, auto flip 180°
Manual Control Speed	Pan: 0.1° ~ 350° /s; Tilt: 0.1° ~ 250° /s
Preset Speed	Pan: 500° /s; Tilt: 500° /s
Presets	300
PTZ Mode	5 Pattern, 8 Tour, Auto Pan ,Auto Scan
Speed Setup	Human-oriented focal Length/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	720P(1280x720)
Frame Rate	25/30/50/60fps@720P
Video Output	1-channel BNC high definition video output/ CVBS standard definition video output (switchable)

Day/Night	Auto(ICR) / Color / B/W
OSD Menu	Support
Backlight Compensation	BLC / HLC / WDR (120dB)
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

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB,ANSI C63.4- 2014 UL: UL60950-1+CAN/CSA C22.2.No.60950-1
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### Interface

Video Interface	1
Audio Interface	1 channel in
RS485	1
Alarm I/O	2/1

### Electrical

Power Supply	AC24V/1.5A(±10%)
Power Consumption	13W, 23W (Heater on)

### Environmental

Operating Conditions	-40°C ~ 60°C (-40°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP67
Vandal Resistance	IK10

### Construction

Casing	Metal
Dimensions	Φ186(mm) x 253(mm)
Net Weight	2.5kg(5.51lb)
Gross Weight	4.5kg(9.92lb)

**Ordering Information**

Type	Part Number	Description
1MP PTZ Camera	DH-SD50131I-HC	1MP 31x Starlight PTZ HDCVI Camera, WDR, PAL
	DH-SD50131IN-HC	1MP 31x Starlight PTZ HDCVI Camera, WDR, NTSC
	SD50131I-HC	1MP 31x Starlight PTZ HDCVI Camera, WDR, PAL
	SD50131IN-HC	1MP 31x Starlight PTZ HDCVI Camera, WDR, NTSC
Accessories	PFB300S	Wall Mount
	PFA110	Mount Adapter
	AC24V/1.5A	Power Adapter
	PFA140	Power Box
	PFB300C	Ceiling Mount
	PFA120	Junction Box
	PFA150	Pole Mount
	PFA151	Corner Mount
PFB303S	Parapet Mount	

**Accessories**

Included:



PFB300S  
Wall Mount



PFA110  
Mount Adapter



AC24V/1.5A  
Power Adapter

Optional:



PFA140  
Power box



PFB300C  
Ceiling Mount



PFA120  
Junction Box



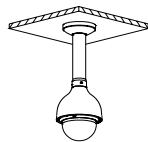

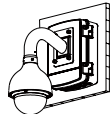
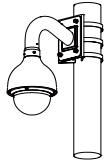

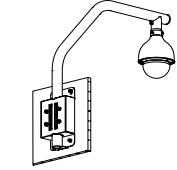
PFA150  
Pole Mount



PFA151  
Corner Mount



PFB303S  
Parapet Mount

Ceiling Mount	Junction Mount
PFA110 + PFB300C	PFA110 + PFB300S + PFA120
	
Power Box Mount	Pole Mount
PFA110 + PFB300S + PFA140	PFA110 + PFB300S + PFA150
	
Corner Mount	Parapet Mount
PFA110 + PFB300S + PFA151	PFA110 + PFB303S
	

**Dimensions (mm)**

