**Dahua**
TECHNOLOGY

# DH-SD49212I-HC
## 2MP 12x Starlight IR PTZ HDCVI Camera



· 1/2.8" 2Megapixel STARVIS™ CMOS
· Powerful 12x optical zoom
· Starlight technology
· 120dB true WDR, 3D DNR
· Max. 25/30fps@1080P, 25/30/50/60fps@720P
· IR distance up to 100m
· IP66

WDR | 0.005Lux | ICR D/N | IP66

## System Overview

Featuring with powerful optical zoom and accurate pan/tilt/zoom performance, the SD49 series PTZ camera can provide large monitoring range and great detail. The camera delivers 1080P resolution at 25/30 fps, with 12x optical zoom, and has very excellent low light performance due to adopting the latest starlight technology. SD49 series PTZ is equipped with smooth control, high quality image and good protection, which make it can meet small and medium size 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
Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. For applications with both bright and low lighting conditions that change quickly, true WDR (120dB) 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 +70 °C (-40 °F to +158 °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.

## Technical Specification

### Camera

| | |
|---|---|
| Image Sensor | 1/2.8" STARVIS™ CMOS |
| Effective Pixels | 1920(H) x 1080(V), 2 Megapixels |
| Scanning System | Progressive |
| Electronic Shutter Speed | PAL: 1/3s~1/30,000s<br>NTSC: 1/4s~1/30,000s |
| Minimum Illumination | Color: 0.005Lux@F1.6; B/W: 0.0005Lux@F1.6; 0Lux@F1.6 (IR on) |
| S/N Ratio | More than 55dB |
| IR Distance | Distance up to 100m (328ft) |
| IR On/Off Control | Auto/Manual |
| IR LEDs | 6 |

### Lens

| | |
|---|---|
| Focal Length | 5.3mm~64mm |
| Max. Aperture | F1.6 ~ F3.0 |
| Angle of View | H: 58.2° ~ 4.8° |
| Optical Zoom | 12x |
| 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 |
|---|---|---|---|
| 883m(2897ft) | 353m(1158ft) | 177m(581ft) | 88m(289ft) |

### PTZ

| | |
|---|---|
| Pan/Tilt Range | Pan: 0° ~ 360° endless; Tilt: -15° ~ 90°,auto flip 180° |
| Manual Control Speed | Pan: 0.1° ~200° /s; Tilt: 0.1° ~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/ 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 | 1080P(1920×1080)/720P(1280×720) |
| Frame Rate | 25/30fps@1080P, 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<br>FCC: Part15 subpartB,ANSI C63.4- 2014<br>UL: UL60950-1+CAN/CSA C22.2,No.60950-1 |

### Interface

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

### Electrical

| | |
|---|---|
| Power Supply | DC 12V/3A |
| Power Consumption | 13W, 20W (IR on) |

### Environmental

| | |
|---|---|
| Operating Conditions | -40°C ~ 70°C (-40°F ~ +158°F) / Less than 95% RH |
| Ingress Protection | IP66 |
| Vandal Resistance | N/A |

### Construction

| | |
|---|---|
| Casing | Metal |
| Dimensions | Φ160(mm) x 295(mm) |
| Net Weight | 3kg(6.61lb) |
| Gross Weight | 4.2kg(9.26lb) |

## Ordering Information

| Type | Part Number | Description |
|------|-------------|-------------|
| 2MP PTZ Camera | DH-SD49212I-HC | 2MP 12x Starlight IR PTZ HDCVI Camera, WDR, PAL |
| | DH-SD49212IN-HC | 2MP 12x Starlight IR PTZ HDCVI Camera, WDR, NTSC |
| | SD49212I-HC | 2MP 12x Starlight IR PTZ HDCVI Camera, WDR, PAL |
| | SD49212IN-HC | 2MP 12x Starlight IR PTZ HDCVI Camera, WDR, NTSC |
| Accessories | PFB305W | Wall Mount |
| | PFA111 | Mount Adapter |
| | DC12V/3A | Power Adapter |
| | PFA140 | Power Box |
| | PFB300C | Ceiling Mount |
| | PFA120 | Junction Box |
| | PFA150 | Pole Mount |
| | PFA151 | Corner Mount |
| | PFB303S | Parapet Mount |

## Accessories

Included:



PFB305W
Wall Mount

Optional :



PFA111
Mount Adapter



DC12V/3A
Power Adapter



PFA140
Power Box



PFB300C
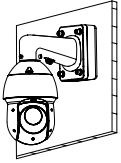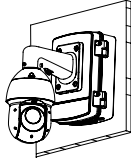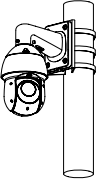Ceiling Mount



PFA120
Junction Box
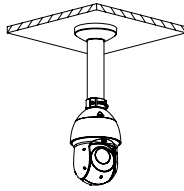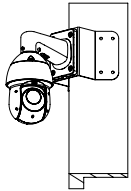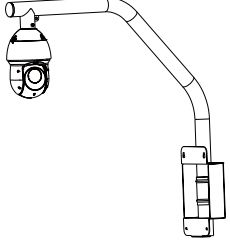


PFA150
Pole Mount



PFA151
Corner Mount



PFB303S
Parapet Mount

| Ceiling Mount | Junction Mount |
|---------------|----------------|
| PFA111 + PFB300C | PFB305W + PFA120 |



| Power Box Mount | Pole Mount |
|-----------------|------------|
| PFB305W + PFA140 | PFB305W + PFA150 |



| Corner Mount | Parapet Mount |
|--------------|---------------|
| PFB305W + PFA151 | PFA111+ PFB303S |



## Dimensions (mm)