**Dahua** TECHNOLOGY

# 30x Starlight IR PTZ Dome
## 2MP Indoor/Outdoor HDCVI Camera

**HDCVI**

· Max 60fps@720p and 30fps@1080p
· Starlight Technology for Dark Environments
· Powerful 30x Optical Zoom
· True WDR
· Built-in 2/1 Alarm in/out
· HD and SD Switchable
· IR Distance Up to 150m (492ft)
· Outdoor Rated IP66

| 1080p FULL HD | 150 m IR | WDR | IP66 |

### System Overview

Experience full HD 1080p video with the simplicity of using existing coaxial infrastructure. Delivering full HD 1080p over a single coaxial cable provides the best of both worlds for users who want to maintain their existing analog infrastructure but want high definition images at a more affordable price. The sleek design makes the HDCVI 30x PTZ Dome camera ideal for residential or small to mid-size businesses where aesthetics are important.

### Functions

**Long Distance Transmission**

The HDCVI Dome camera combines high definition resolution with the simplicity of coaxial infrastructure for an easy upgrade. HDCVI technology guarantees long-distance and real-time transmission without any loss of signal. It supports 1200m and 800m signal transmission for 720p and 1080p respectively via RG6 coaxial cable, and 800m and 500m for 720p and 1080p respectively via RG59 coaxial cable. With a CAT6 UTP cable, the transmission distance reaches up to 450m and 300m for 720p and 1080p respectively*.

*Actual results verified by real-scene testing in Dahua's test laboratory.

**Starlight Technology**

For challenging low-light applications, Dahua's Starlight models offer best-in-class light sensitivity capturing color details in low light down to 0.005 lux. These cameras overcome challenging lighting conditions by using a judicious selection of optical parameters to balance light throughout the image process. The result is stunningly clear images in very dark environments.

**Wide Dynamic Range**

Embeded with industry leading wide dynamic range (WDR) technology, vivid picutures 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.

**Simplicity**

HDCVI blends high quality images, affordability, and ease of use by utilizing traditional analog technology. Dahua HDCVI cameras are designed to make installation easy for a seamless upgrade from traditional analog without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

**3 Signals over 1 Coaxial Cable**

Dahua's patented HDCVI technology bridges the gap between low resolution analog and high definition IP for users who require higher quality video without upgrading to IP. HDCVI technology supports 3 signals (audio, video and data) to be transmitted simultaneously over 1 coaxial cable. The camera offers 1080p/720p high resolution video and communicates with HCVR through control signals.

**Environmental**

With a temperature range of -40°C ~ +70°C (-40°F ~ +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. For enviorments with rain, sleet, snow and fog, an integrated wiper provides users with clear visibility at all times.

**Protection**

Supporting ±25% input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 8KV lightning rating provides protectection against the camera and its structure from the effects of lightning.

**IR Illumination**

The camera's integrated IR illumination provides high performance in extreme low-light environments up to 150m (492ft).

## Technical Specification

### Camera

| | |
|---|---|
| Image Sensor | 1/2.8" STARVIS™ CMOS |
| Effective Pixels | 1920 H x 1080 V |
| Scanning System | Progressive |
| Electronic Shutter Speed | 1/1 ~ 1/30,000s |
| Minimum Illumination | Color: 0.005Lux@F1.6; B/W: 0.0005Lux@F1.6; 0Lux (IR on) |
| S/N Ratio | More than 50dB |
| IR Distance | 150m (492ft) |
| IR On/Off Control | Auto / Manual |
| IR LEDs | 4 |

### Lens

| | |
|---|---|
| Lens Type | Motorized/ Auto Iris |
| Mount Type | Board-in |
| Focal Length | 4.5mm ~ 135mm (30x Optical zoom) |
| Max Aperture | F1.6 ~ F5.0 |
| Angle of View | H: 67.8° ~ 2.7° |
| Focus Control | Auto / Manual |
| Close Focus Distance | 100mm ~ 1000mm |

### PTZ

| | |
|---|---|
| Pan/Tilt Range | Pan: 0° ~ 360° endless; Tilt: -15° ~ 90°, auto flip 180° |
| Manual Control Speed | Pan: 0.1° ~300° /s; Tilt: 0.1° ~200° /s |
| Preset Speed | Pan: 400° /s; Tilt: 300° /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 |
| Time Task | Auto activation of Preset/ Pan/ Scan/ Tour/ Pattern by preset-time |
| Protocol | DH-SD, Pelco-P/D (Auto Recognition) |

### Video

| | |
|---|---|
| Resolution | 30fps@1080p, 30/60fps@720p |
| Video Output | 1-channel BNC HDCVI High Definition Video Output / CVBS Standard Definition Video Output (Switchable) |
| Day/Night | Auto (ICR) / Color / B/W |
| BLC Mode | 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 | 0°/180° |
| Privacy Masking | Up to 24 areas |

### Interface

| | |
|---|---|
| Audio Interface | 1 Input |
| RS485 | 1 |
| Alarm | 2/1 In/Out |

### Certifications

| | |
|---|---|
| Certifications | FCC (SEFD1602154-B) UL (E234884-A54-UL) |

### Electrical

| | |
|---|---|
| Power Supply | AC24V/3A (±10%) |
| Power Consumption | Max. 13W, 25W (IR on) |

### Environmental

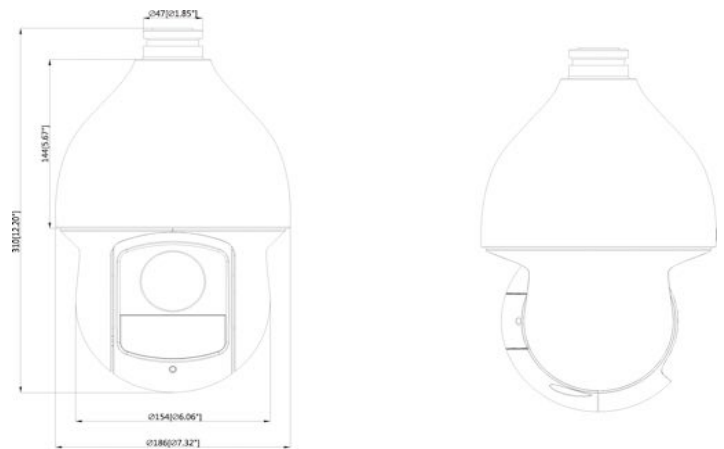| | |
|---|---|
| Operating Conditions | -40°C ~ +70°C (-40°F ~ +158°F) / Less than 90% RH *Start up should be done at above -35°C (-31°F) |
| Storage Conditions | -30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH |
| Ingress Protection | IP66 |

### Construction

| | |
|---|---|
| Casing | Metal+Plastic |
| Dimensions | Φ186mm x 309mm (Φ7.32" x 12.17") |
| Net Weight | 3.7 kg (8.16 lbs) |
| Gross Weight | 6.8kg (15.00lbs) |

## Ordering Information

| Type | Part Number | Description |
|------|-------------|-------------|
| 2MP Camera | DH-SD59A230IN-HC-S2 | 2MP HDCVI PTZ 30x Zoom, WDR, IP66 |
| Accessories | PFB300S | Wall Mount Bracket (Included) |
| | PFA110 | Mount Adapter (Included) |
| | Power Supply | Power Supply (Included) |
| | PFB300C | Ceiling Mount Bracket |
| | PFB303S | Parapet Mount  Bracket |
| | PFA140 | Junction Box |
| | PFA120 | Water-proof Junction Box |
| | PFA150 | Pole Mount Bracket |
| | PFA151 | Pole Mount Bracket |

## Dimensions (mm/inch)



## Accessories

Included:



PFB300S    PFA110    Power Supply
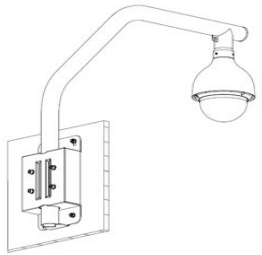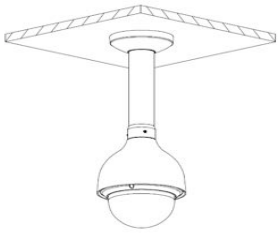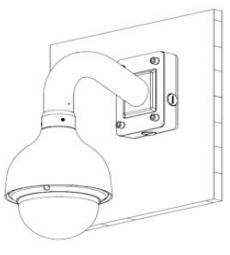
Optional:



PFB303S    PFB300C    PFA140    PFA120    PFA150    PFA151

| Ceiling Mount | Ceiling Mount | Wall Mount |
|:---:|:---:|:---:|
| **PFA110+PFB303S** | **PFA110+PFB300C** | **PFA110+PFB300S+PFA120** |
|  |  |  |
| **Pole Mount** | **Junction Mount** | **Corner Pole Mount** |
| **PFA110+PFB300S+PFA140** | **PFA110+PFB300S+PFA150** | **PFA110+PFB300S+PFA151** |
|  |  |  |