

# DH-IPC-PFW8601-A180

3x2MP Multi-Sensor Panoramic Network IR Bullet Camera



- Three 1/2.8" 2Megapixel progressive scan STARVIS™ CMOS
- H.265/H.264 triple-stream encoding
- Max 25/30fps@4096x832
- Support 180-degree panoramic view
- Day/Night(ICR), 3DNR, AWB, AGC, BLC,WDR
- Smart detection
- Intelligent Function
- Max. IR LEDs length 30m
- Micro SD memory, IP67, IK10,PoE+



## System Overview

The multi-sensor camera provides added flexibility for capturing wide area video surveillance. With three 2MP sensors working in tandem to create a comprehensive 180-degree overview, the camera can replace multiple single-sensor cameras providing a higher return on investment. The multi-sensor camera features contrast, backlight compensation, white balance, and resolution control to create a crystal-clear image even in the most challenging lighting conditions.

## Functions

### True Day/Night

A day/night mechanical IR cut filter makes this camera ideal for applications with fluctuating lighting conditions, delivering color images during the day and automatically switching to monochrome as the scene darkens.

### Starlight Technology

Featured with Dahua Starlight Technology, the camera is ideal for applications with challenging light conditions. Its low light performance delivers usable video with minimal ambient light. Even in extreme low light conditions, Starlight Technology is capable of delivering color images in nearly complete darkness.

### 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.

### Intelligent Video System (IVS)

Dahua camera is equipped with a built-in intelligent analytic algorithm based on video, which can realize intelligent functions like Tripwire, Intrusion, Abandoned, Missing and so on, to quickly and accurately respond to monitoring events in specific area. It can enhance monitoring efficiency. In addition, the camera supports intelligent tamper detection,

which is to generate warning message via detecting dramatic scene change and to guarantee effective video surveillance.

### 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 30m (98ft).

### Protection (IP67, IK10, wide voltage)

Supporting  $\pm 25\%$  input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning. IP67 is supported by the camera, which makes it suitable for both indoor and outdoor environments. IK10 compliance enables the camera to sustain the equivalent of 55 kg (120lbs) force.

### Environmental

Standard Dahua camera can function from  $-30^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$  to  $+140^{\circ}\text{F}$ ) with 95% humidity, meanwhile some models support heater module optional which allows the camera to function from  $-40^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  ( $-40^{\circ}\text{F}$  to  $+140^{\circ}\text{F}$ ). With a temperature range of  $-40^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$ , the camera is designed for extreme temperature environments.

## Technical Specification

### Camera

|                          |  |
|--------------------------|--|
| Image Sensor             | Three 1/2.8" 2Megapixel progressive scan CMOS  |
| Effective Pixels         | 4096(H)x832(V)   |
| RAM/ROM                  | 1024MB/128MB   |
| Scanning System          | Progressive  |
| Electronic Shutter Speed | Auto/Manual, 1/3~1/100000s   |
| Minimum Illumination     | 0.007Lux/F1.8( Color,1/3s,30IRE)<br>0.05Lux/F1.8( Color,1/30s,30IRE)<br>0Lux/F1.8(IR on) |
| S/N Ratio                | More than 50dB   |
| IR Distance              | Distance up to 30m(98ft)   |
| IR On/Off Control        | Auto/ Manual   |
| IR LEDs                  | 8  |

### Lens

|                      |                |           |           |          |
|----------------------|----------------|-----------|-----------|----------|
| Lens Type            | Fixed          |           |           |          |
| Mount Type           | Board-in       |           |           |          |
| Focal Length         | 3.6mm          |           |           |          |
| Max. Aperture        | F1.8           |           |           |          |
| Angle of View        | H: 180°, V:44° |           |           |          |
| Optical Zoom         | N/A            |           |           |          |
| Focus Control        | Fixed          |           |           |          |
| Close Focus Distance | N/A            |           |           |          |
| DORI Distance        | Detect         | Observe   | Recognize | Identify |
|                      | 52m(171ft)     | 21m(69ft) | 10m(33ft) | 5m(16ft) |

### Pan/Tilt/Rotation

|                         |  |
|-------------------------|--|
| Pan/Tilt/Rotation Range | Pan:0°~360°; Tilt:0°~90°; Rotation:0°~360° |
|-------------------------|--|

### Intelligence

|                                |   |
|--------------------------------|---|
| IVS                            | Tripwire, Intrusion, Object Abandoned/Missing |
| Advanced Intelligent Functions | Heat Map, E-PTZ                               |

### Video

|                      |  |
|----------------------|--|
| Compression          | H.265+/H.265/H.264+/H.264                        |
| Streaming Capability | 3 Streams  |
| Resolution           | 4096x832/3840x780/2560x520/<br>1280x260/1024X208 |
| Frame Rate           | Main Stream: 4096x832(1~25/30fps)                |
|                      | Sub Stream: 1024X208 (1 ~ 25/30fps)              |
|                      | Third Stream: 1280x260 (1 ~ 25/30fps)            |
| Bit Rate Control     | CBR/VBR  |
| Bit Rate             | H.265: 4Kbps~ 10Mbps<br>H.264: 8Kbps~ 16Mbps     |

|                                     |   |
|-------------------------------------|---|
| Day/Night                           | Auto(ICR) / Color / B/W                 |
| BLC Mode                            | BLC / HLC / WDR(120dB)                  |
| White Balance                       | Auto/Natural/Street Lamp/Outdoor/Manual |
| Gain Control                        | Auto/Manual                             |
| Noise Reduction                     | 3D DNR                                  |
| Motion Detetion                     | Off / On (4 Zone, Rectangle)            |
| Region of Interest                  | Off / On (4 Zone)                       |
| Electronic Image Stabilization(EIS) | N/A                                     |
| Smart IR                            | Support                                 |
| Defog                               | N/A                                     |
| Digital Zoom                        | 16x                                     |
| Flip                                | N/A                                     |
| Mirror                              | N/A                                     |
| Privacy Masking                     | Off / On (4 Area, Rectangle)            |

### Audio

|             |                           |
|-------------|---------------------------|
| Compression | G.711a/G.711Mu/AAC/ G.726 |
|-------------|---------------------------|

### Network

|                     |   |
|---------------------|---|
| Ethernet            | RJ-45 (100/1000Base-T)  |
| Protocol            | HTTP;HTTPS;TCP;ARP;RTSP;RTP;UDP;SMTP;FTP;DHCP;DNS;DDNS;PPPOE;IPv4/v6;QoS;UPnP;NTP;Bonjour;802.1x;Multicast;ICMP;IGMP;SNMP |
| Interoperability    | ONVIF, PSIA, CGI  |
| Streaming Method    | Unicast / Multicast   |
| Max. User Access    | 10 Users/20 Users   |
| Edge Storage        | NAS<br>Local PC for instant recording<br>Mirco SD card 128GB  |
| Web Viewer          | IE, Chrome, Firefox, Safari   |
| Management Software | Smart PSS, DSS, Easy4ip   |
| Smart Phone         | IOS, Android  |

### Certifications

|                |  |
|----------------|--|
| Certifications | CE (EN 60950:2000)<br>UL:UL60950-1<br>FCC: FCC Part 15 Subpart B |
|----------------|--|

### Interface

|                 |  |
|-----------------|--|
| Video Interface | 1 Port(For adjustment only)                                    |
| Audio Interface | 1/1 channel In/Out   |
| RS485           | N/A  |
| Alarm           | 2 channel In: 5mA 5VDC<br>1 channel Out: 1A 30VDC / 0.5A 50VAC |

### Electrical

|                   |                                |
|-------------------|--------------------------------|
| Power Supply      | AC24V, PoE+ (802.3at)(Class 4) |
| Power Consumption | <23W                           |

Environmental

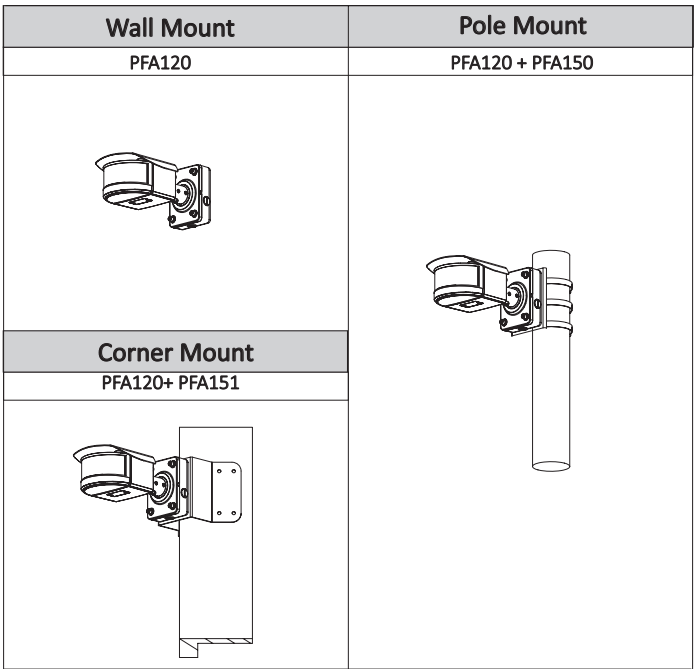
|                      |   |
|----------------------|---|
| Operating Conditions | -40° C ~ +60° C (-40° F ~ +140° F) / Less than 95% RH |
| Storage Conditions   | -40° C ~ +60° C (-40° F ~ +140° F) / Less than 95% RH |
| Ingress Protection   | IP67  |
| Vandal Resistance    | IK10  |

Construction

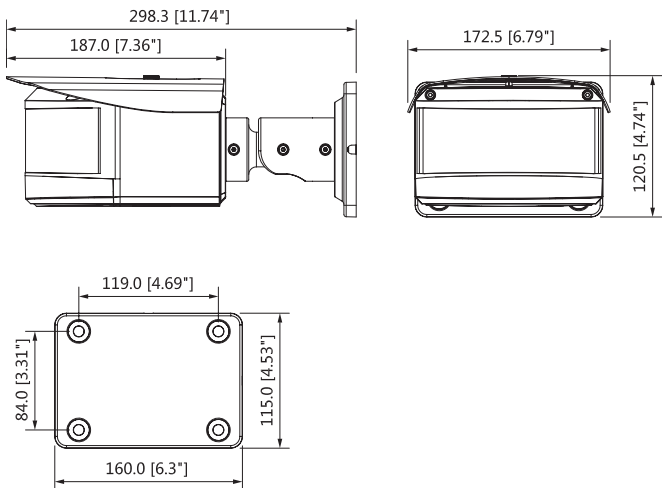
|              |   |
|--------------|---|
| Casing       | Metal   |
| Dimensions   | 298.3mm×172.5mm×120.5mm<br>(11.74"×6.79"×4.74") |
| Net Weight   | 2.60kg(5.73lb)                                  |
| Gross Weight | 3.41 kg(7.52lb)                                 |

Ordering Information

| Type                   | Part Number          | Description  |
|------------------------|----------------------|--|
| 3x2MP camera           | DH-IPC-PFW8601P-A180 | 3x2MP Multi-Sensor Panoramic Network IR Bullet Camera,WDR, PAL |
|                        | DH-IPC-PFW8601N-A180 | 3x2MP Multi-Sensor Panoramic Network IR Bullet Camera,WDR,NTSC |
|                        | IPC-PFW8601P-A180    | 3x2MP Multi-Sensor Panoramic Network IR Bullet Camera,WDR, PAL |
|                        | IPC-PFW8601N-A180    | 3x2MP Multi-Sensor Panoramic Network IR Bullet Camera,WDR,NTSC |
| Accessories (optional) | PFA120               | Junction Box   |
|                        | PFA120+PFA150        | Pole mount   |
|                        | PFA120+PFA151        | Corner mount   |



Dimensions (mm/inch)



Accessories

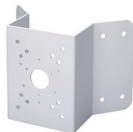
Optional:



PFA120  
Junction Box



PFA150  
Pole mount



PFA151  
Corner mount