

# IPC-B1A20

## 2MP IR Mini-Bullet Network Camera



- 1/2.9" 2Megapixel progressive CMOS
- H.264+ & H.264 dual-stream encoding
- 25/30fps@1080P(1920×1080)
- DWDR, Day/Night(ICR), 3DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 2.8 mm fixed lens (3.6mm optional)
- Max IR LEDs Length 30m
- IP67, PoE



### System Overview

The EZ-IP series is perfect for small to medium size applications like home/residential security, small retail shops, and other typical SMB applications. It offers a perfect alternative to migrate from analog to an IP system with its easy to use nature and cost effectiveness.

The EZ-IP series is fully in line with Dahua's quality assurance protocol. Various tests such as anti-vibration, water resistance, and aging tests are performed to ensure Dahua quality standards.

### 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

#### Regions of interest

Regions of Interest (ROI) is a user defined feature that allows the operator to monitor specific areas of a scene while still maintaining overall situational awareness of less important areas

#### Smart IR

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts to the intensity of camera's infrared LEDs to compensate for the distance of an object. Smart IR technology prevents IR LEDs from whiting 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).

#### Image flip

Capturing unnecessary data such as surrounding hallway walls can increase storage requirements without any added value. The image flip feature allows the camera's image to be rotated in 90° increments for better video optimization.

### Protection

Supporting  $\pm 10\%$  input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 6KV lightning rating provides protection against the camera and its structure from the effects of lightning.

### Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer

### Smart H.264+

Delivering high quality video without straining the network, Smart H.264+ is the optimized implementation of H.264. The Smart H.264+ encoding platform includes a scene adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction, providing a savings of up to 70% of bandwidth and storage when compared with standard H.264.

Technical Specification

Camera	
Image Sensor	1/2.9" 2Megapixel progressive CMOS
Effective Pixels	1920(H) x1080(V)
RAM/ROM	128MB/16MB
Scanning System	Progressive
Minimum Illumination	0.1Lux/F2.0(Color), 0Lux/F2.0(IR on)
S/N Ratio	More than 50dB
IR Distance	Distance up to 30m(98ft)
IR On/Off Control	Auto/ Manual
IR LEDs	18

Lens	
Lens Type	Fixed
Mount Type	Board-in
Focal Length	2.8 mm (3.6 mm optional)
Max. Aperture	F2.0/F2.0
Angle of View	H:105.5°/83°, V:57°/44°
Focus Control	Fixed
Close Focus Distance	N/A

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

Video	
Compression	H.264+/H.264
Streaming Capability	2 Streams
Resolution	1080P(1920×1080)/720P(1280×720)/ D1(704×576/704×480)/CIF(352×288/352×240)
Frame Rate	2M (1 ~ 25/30fps)s
	D1/CIF(1 ~ 25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H264:24K ~ 8192Kbps
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / DWDR

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
Digital Zoom	16x
Flip	0°/90°/180°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

Audio	
Compression	N/A

Network	
Ethernet	RJ-45 (10/100Base-T)
Protocol	HTTP;TCP;ARP;RTSP;RTP;UDP;RTCP;SMTP;FTP;DHCP ;DNS;DDNS;PPPOE;IPv4/v6;SNMP;QoS;UPnP;NTP
Interoperability	ONVIF, PSIA, CGI
Streaming Method	Unicast / Multicast
Max. User Access	10 Users/20 Users
Edge Storage	NAS(Network Attached Storage) Local PC for instant recording
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS,Easy4ip
Smart Phone	iPhone, iPad, Android Phone

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

Interface	
Video Interface	N/A
Audio Interface	N/A
RS485	N/A
Alarm	N/A

Electrical	
Power Supply	DC12V PoE (802.3af)(Class 0)
Power Consumption	<4.2W

## Environmental

Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Storage Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	N/A

## Construction

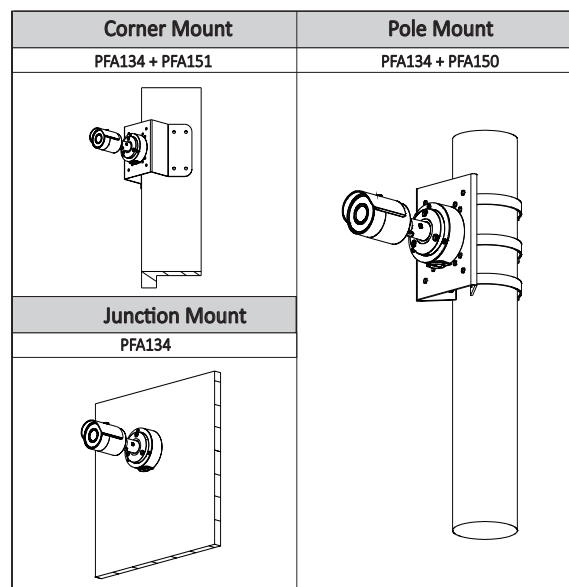
Casing	Metal+Plastic
Dimensions	Φ70mm×164.7mm(2.76"x6.49")
Net Weight	0.38Kg(0.84lb)
Gross Weight	0.44Kg(0.97lb)

## Ordering Information

Type	Part Number	Description
2MP Camera	IPC-B1A20P-0280B	2MP IR Mini-Bullet Network Camera, 2.8mm,PAL
	IPC-B1A20N-0280B	2MP IR Mini-Bullet Network Camera, 2.8mm, NTSC
	IPC-B1A20P-0360B	2MP IR Mini-Bullet Network Camera, 3.6mm,PAL
	IPC-B1A20N-0360B	2MP IR Mini-Bullet Network Camera, 3.6mm,NTSC
Accessories (optional)	PFA134	Junction box
	PFA150	Pole mount
	PFA151	Corner mount

## Accessories

## Optional:

PFA134  
Junction BoxPFA150  
Pole MountPFA151  
Corner Mount

## Dimensions (mm/inch)

