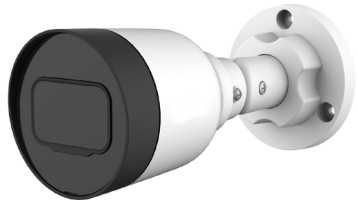# IPC-B1B20

2MP IR Mini-Bullet Network Camera

· 1/2.7" 2Megapixel progressive CMOS
· H.265+ & H.265 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

Dahua 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.

Dahua is fully in line with Dahua's quality. Stable and reliable components are utilized and Various tests such as anti-vibration, water resistance, and aging tests are performed to ensure Dahua quality standards.

Functions

Smart Codec (H.265+ & H.264+)

Smart Codec is the optimized implementation of standard video compression (H.265 & H.264) that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart Codec technology reduces bit rate and storage requirements by up to 70% when compared to the standard video compression.

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.

Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from -30° C to +60° C (-22° F to +140° F) with 95% humidity.

Protection (IP67, wide voltage)

The camera allows for ±25% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 2KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) .

Interoperability

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

Technical Specification

Camera

Image Sensor	1/2.7" 2Megapixel progresive CMOS
Effective Pixels	1920(H) x1080(V)
RAM/ROM	64MB/16MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.09Lux/F2.0(Color,1/3s,30IRE) 0.5Lux/F2.0(Color,1/30s,30IRE) 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	1

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:115°/87.5°, V:60°/47°
Focus Control	Fixed
Close Focus Distance	0.6m(1.97ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	43.5m(143ft)	17.4m(57ft)	8.7m(28.5ft)	4.3m(14ft)
	3.6 mm	53.3m(175ft)	21.3m(70ft)	10.7m(35ft)	5.3m(17.4ft)

PTZ

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

Video

Compression	H.265/H.264H/MJPEG(Sub Stream)
Smart Codec	Support H.265+/H.264+
Streaming Capability	2 Streams

Resolution	1080P(1920×1080)/1.3M(1280×960)/
	720P(1280×720)/D1(704×576/704×480)//VGA(640×480)/
	CIF(352×288/352×240)

Frame Rate	Main Stream: 1080P (1 ~ 25/30fps)
	Sub Stream: D1(1 ~ 25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H265:12K~6400K H.264:32K ~8192K
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;RTCP;UDP;DHCP;DNS;IPV4; NTP;Multicas; ICMP; IGMP
Interoperability	ONVIF Profile S
Streaming Method	Unicast / Multicast
Max. User Access	10 Users/20 Users
Edge Storage	N/A
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS,DMSS
Smart Phone	IOS, Android

Certifications

Certifications	CE: (EN 60950:2000) 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
Strorage 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×162.6mm(2.76''x6.49'')
Net Weight	0.22Kg(0.49lb)
Gross Weight	0.3Kg(0.66lb)

Ordering Information

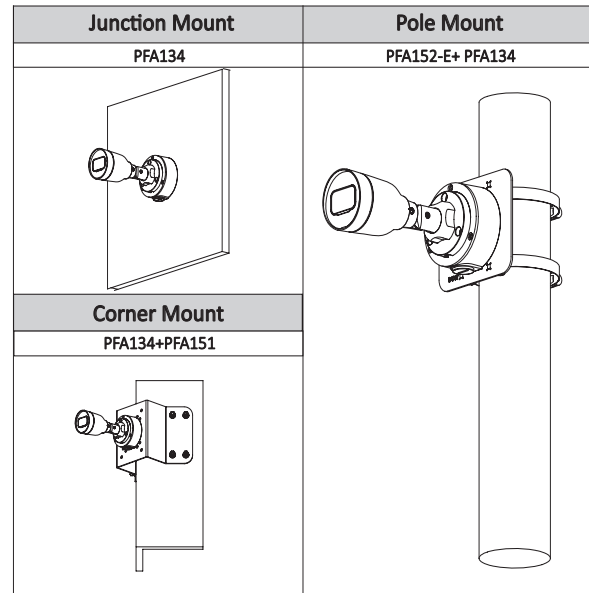| Type	Part Number	Description
2MP Camera	IPC-B1B20P-0280B	2MP IR Mini-Bullet Network Camera, 2.8mm,PAL
	IPC-B1B20N-0280B	2MP IR Mini-Bullet Network Camera, 2.8mm, NTSC
	IPC-B1B20P-0360B	2MP IR Mini-Bullet Network Camera, 3.6mm,PAL
	IPC-B1B20N-0360B	2MP IR Mini-Bullet Network Camera, 3.6mm,NTSC
Accessories (optional)	PFA134	Junction box
	PFA152-E	Pole mount
	PFA151	Corner mount

Accessories

Optional:

PFA134
Junction Box

PFA151
Corner mount

PFA152-E
Pole mount

Junction Mount	Pole Mount
PFA134	PFA152-E+ PFA134

Corner Mount	
PFA134+PFA151	

Dimensions (mm/inch)

162.6 [6.4"]

82.3 [3.24"]

70 [2.75"]
65.4 [2.58"]
65.4 [2.57"]
69.8 [2.75"]