

# IPC-T1B20

## 2MP IR Turret 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

EZ-IP 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.

EZ-IP 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 progressive 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)<br>0.5Lux/F2.0(Color,1/30s,30IRE)<br>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 |        | 0.5m(1.64ft)             |             |              |              |
| DORI Distance        | Lens   | Detect                   | Observe     | Recognize    | Identify     |
|                      | 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)/<br>720P(1280×720)/D1(704×576/704×480)/ VGA(640×480)/<br>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<br>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;<br>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)<br>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 | <4.8W                         |

## 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

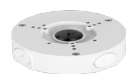
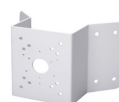
|              |                            |
|--------------|----------------------------|
| Casing       | Metal+Plastic              |
| Dimensions   | Φ109mm×85.5mm(4.29"×3.36") |
| Net Weight   | 0.24Kg(0.53lb)             |
| Gross Weight | 0.36Kg(0.79lb)             |

## Ordering Information

| Type                   | Part Number      | Description                               |
|------------------------|------------------|-------------------------------------------|
| 2MP Camera             | IPC-T1B20P-0280B | 2MP IR turret Network Camera, 2.8mm, PAL  |
|                        | IPC-TB20N-0280B  | 2MP IR turret Network Camera, 2.8mm, NTSC |
|                        | IPC-T1B20P-0360B | 2MP IR turret Network Camera, 3.6mm, PAL  |
|                        | IPC-T1B20N-0360B | 2MP IR turret Network Camera, 3.6mm, NTSC |
| Accessories (optional) | PFA130-E         | Junction box                              |
|                        | PFA152-E         | Pole mount                                |
|                        | PFA151           | Corner mount                              |
|                        | PFB203W          | Wall mount                                |
|                        | PFA106           | Ceiling mount                             |
|                        | PFB220C          | Ceiling mount                             |

## Accessories

## Optional:

PFA130-E  
Junction BoxPFB203W  
Wall mountPFA152-E  
Pole mountPFA151  
CornermountPFA106  
Ceiling mountPFB220C  
Ceiling mount

| Corner Mount<br>PFA151+PFB203W    | Junction Mount<br>PFA130-E | Pole Mount<br>PFA152-E+ PFB203W |
|-----------------------------------|----------------------------|---------------------------------|
|                                   |                            |                                 |
| Ceiling Mount<br>PFA106 + PFB220C | Wall Mount<br>PFB203W      |                                 |
|                                   |                            |                                 |

## Dimensions (mm/inch)

