

# IR Fisheye Camera

## 6 MP HD Vandal-proof Network IR-Fisheye Camera



- ImmerVision Enables® Panamorph Technology
- H.264 and MJPEG Dual Encoding
- Max. 25/30 fps at 6 MP (3072 x 2048)
- Multiple Dewarp Modes
- Digital WDR and Day/Night (ICR) Imager
- Max. IR LED Length 10 m (33 ft)
- IP67 Ingress Protection and IK10 Vandal Resistance
- Five-year Warranty

### System Overview

The 6 MP Megapixel Fisheye camera delivers superior optics and viewing functionality for optimal 360° image quality. The compact camera replaces multiple single-sensor cameras providing a higher return on investment for your security dollars. The camera's elegant blend of aesthetics combined with a range of easy mounting solutions provides an excellent choice for a variety of small to mid-size applications.

### Functions

#### Panamorph Technology

The fisheye camera incorporates Panamorph Technology from ImmerVision Enables®, an industry leader in 360° solutions and applications. Panamorph technology is comprised of patented panomorph optics and viewing functionality for optimal 360° image quality. The panomorph optic includes magnified zones of interest based on an innovative distortion control concept. The viewing functionality removes all added distortion and enables 360° immersive navigation within live or recorded 360° video.

ImmerVision Enables® is the only universally-accepted 360° dewarping standard; all major VMS platforms and camera vendors support this technology. This support gives you the freedom to choose the VMS platform of your video surveillance system that best meet your requirements.

#### Smart IR

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 prevents IR LEDs from whiting out images as they come closer to the camera. The camera's integrated IR illumination provides high performance in extreme low-light environments up to 10m (33ft).

#### 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.

#### 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.

#### Intelligent Video System (IVS)

IVS is a built-in video analytic algorithm that delivers intelligent functions to monitor a scene for Tripwire violations, intrusion detection, and abandoned or missing objects. A camera with IVS quickly and accurately responds to monitoring events in a specific area. In addition to scene analytics, the camera supports face detection to quickly capture a face and upload the image to a server. The camera also offers tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.

#### Protection

The camera allows for ±25% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 8KV lightningrating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) and impact test (IK10), the camera is the choice for installation in even the most unforgiving environments.

#### Streaming

With a choice of unicast or multicast streaming and multiple, concurrent streams the camera offers bandwidth-efficient viewing and recording. Depending on the resolution and frame rate selected on the first stream, the second and third stream provides a copy at a lower resolution.

## Technical Specification

### Camera

<b>Image Sensor</b>	1/1.8-in. Exmor R CMOS
<b>Effective Pixels</b>	3072(H) x 2048(V)
<b>Scanning System</b>	Progressive
<b>Electronic Shutter Speed</b>	Auto/Manual 1/3(4) s to 1/100000 s
<b>Minimum Illumination</b>	Color: 0.01 lux at F2.8; B/W: 0 lux ( with IR on)
<b>S/N Ratio</b>	More than 50 dB
<b>IR Distance</b>	10 m (33 ft)
<b>IR On/Off Control</b>	Auto, Manual

### Lens

<b>Lens Type</b>	Fixed Lens
<b>Mount Type</b>	Board-in
<b>Focal Length</b>	1.3 mm
<b>Maximum Aperture</b>	F2.8
<b>Angle of View</b>	180°/360°
<b>Focus Control</b>	Manual

### Auto-tracking

<b>Auto Tracking</b>	Single-scene, multiple-scene, panorama-scene
<b>Tracking Trigger Mode</b>	Manual, Auto (alarm triggered)
<b>Tracking Trigger Event</b>	Targeting, Zoom, Tracking, Recording, Snapshot, Alarm

### Video

<b>Compression</b>	H.264H, H.264B, H.264, MJPEG
<b>Streaming Capability</b>	Three (3) Streams
<b>Resolution</b>	6 MP (3072 × 2048) 4 MP (2048 × 2048) 3 MP (2048 × 1536) UVGA (1600 × 1200) 1.3 MP (1280 × 960) D1 (704 × 480) CIF (342 × 240)
<b>Frame Rate</b>	Main Stream: 6 MP at 25/30 fps Sub Stream 1: D1/CIF at 25/30 fps Sub Stream 2: 1.3 MP/D1 at 25/30 fps
<b>Bit Rate Control</b>	CBR / VBR
<b>Bit Rate</b>	8 to 12288 Kbps
<b>De-warp Modes</b>	Original, Panoramic, Double panoramic, 1+3, E-PTZ, 4 pictures
<b>Day/Night</b>	Auto (ICR), Color, B/W
<b>BLC Mode</b>	BLC, HLC, DWDR
<b>White Balance</b>	Auto, Manual
<b>Gain Control</b>	Auto, Manual
<b>Noise Reduction</b>	3D
<b>Privacy Masking</b>	Up to 4 areas

### Audio

<b>Compression</b>	G.711a, G.711Mu, G.726, AAC
<b>Interface</b>	In: One (1) Channel Out: One (1) Channel Built-in Microphone

### Network

<b>Ethernet</b>	RJ-45 (10/1000 Base-T)
<b>Protocol</b>	IPv4/ IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS, Bonjour, 802.1x, ARP
<b>Interoperability</b>	ONVIF, PSIA, CGI
<b>Max. User Access</b>	20
<b>Web Viewer</b>	IE 10, Firefox, Safari
<b>Mobile Operating Systems</b>	Android, IOS

## Certifications

<b>Certifications</b>	FCC (SEFV1505157-A) UL (E234884-A125-UL)
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## Interface

<b>Memory Slot</b>	Micro SD, up to 64 GB
<b>Alarm</b>	In: Two (2) Out: One (1)

## Electrical

<b>Power Supply</b>	12 VDC, PoE (802.3af)
<b>Power Consumption</b>	Max. 13 W

## Environmental

<b>Operating Conditions</b>	-30°C to +60°C (-22°F to +140°F), Less than 90% RH
<b>Storage Conditions</b>	-30°C to +60°C (-22°F to +140°F), Less than 90% RH
<b>Ingress Protection</b>	IP67
<b>Vandal Resistance</b>	IK10

## Construction

<b>Dimensions</b>	Φ150.0 mm x 50.70 mm (Φ 5.91 in. x 1.99 in.)
<b>Net Weight</b>	0.58 kg (1.28 lbs)
<b>Gross Weight</b>	0.86 kg (1.90 lbs)

## Intelligence

IVS triggers an alarm and takes a defined action for the following events:

<b>Standard Features</b>	Tampering with the camera. Error writing to an onboard Micro SD card. Error sending or receiving data over the network. Unauthorized access to the camera.
<b>Premium Features</b>	
<b>Motion</b>	An object moves through any part of the scene.
<b>Tripwire</b>	A target crosses a user-defined line.
<b>Intrusion</b>	A target enters or exits a defined perimeter.
<b>Scene Change</b>	A person or object moves the camera to change the scene or covers the camera to obscure the scene.
<b>Abandoned/Missing Object</b>	A target leaves an object in designated area, or a target removes an object from the same designated area.
<b>Loitering Detection</b>	A target enters a scene and remains within the scene for a specified amount of time.
<b>Illegal Parking</b>	A target is situated within a boundary and does not move for a specified amount of time.
<b>Fast Motion Detection</b>	A target moves rapidly through a scene.
<b>Advanced Features</b>	
<b>Facial Detection</b>	Detects and captures a snapshot of a human face in a defined area within a scene.
<b>Auto-tracking</b>	Controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene.

## Ordering Information

Type	Part Number	Description
Fisheye Camera	DH-IPC-EBW8600N-IVC	6 MP Vandal-proof Network IR Fisheye camera, True WDR, IP67
Accessories	PFA100	Wall Mount
	PFB302S	Wall Mount
	PFA132	Junction Box
	PFA152	Pole Mount
	PFA151	Corner Mount

## Dimensions (mm)

