ORing

OR-D2125FR-Z-IR
2MP WDR IR Dome Network Camera

· 1/2.8" 2Megapixel progressive Starvis™ CMOS
· H.265 & H.264 dual-stream encoding
· 25/30fps@1080P(1920×1080)
· WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
· Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
· Micro SD card slot, up to 128GB
· 2.7~13.5mm varifocal lens
· Max IR LEDs Length 30m
· IP67, IK10, PoE

1080p FULL HD | H.265+ | Starlight | WDR | 30m IR | IP67 | Vandal-proof

System Overview

The IR Megapixel Vari-focal camera delivers 2MP resolution with a 2.7mm – 13.5mm varifocal lens. 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 at an affordable price.

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.

Starlight Technology
For challenging low-light applications, ORing's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.006lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

Intelligent Video analysis (IVS)
ORing camera is equipped with a built-in intelligent analytic algorithm based on video, which can realize intelligent functions like Tripwire and Intrusion, 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.

Wide Dynamic Range (WDR)
The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, true WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Smart IR Technology
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 50m (164ft).

Protection (IP67, IK10, 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) and impact tests (IK10), The camera complies with an IK10 impact rating making it capable of withstanding the equivalent of 5 kg (11.02 lbs) of force dropped from a height of 40 cm (15.75 in.)

Environmental
ORing 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.

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

ONVIF

Technical Specification

Camera

Image Sensor	1/2.8" 2Megapixel progressive CMOS
Effective Pixels	1920(H) x1080(V)
RAM/ROM	256MB/32MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.006Lux/F1.4(Color,1/3s,30IRE) 0.05Lux/F1.4(Color,1/30s,30IRE) 0Lux/F1.4(IR on)
S/N Ratio	More than 50dB
IR Distance	Distance up to 30m(98ft)
IR On/Off Control	Auto/ Manual
IR LEDs	2

Lens

Lens Type	Motorized(-ZS),Manual(-VFS)
Mount Type	Board-in
Focal Length	2.7mm~13.5mm
Max. Aperture	F1.4
Angle of View	H:106°~29°, V:57°~17°
Focus Control	Motorized(-ZS),Manual(-VFS)
Close Focus Distance	0.2m

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	W	46m(151ft)	18m(59ft)	9m(30ft)	5m(16ft)
	T	153m(502ft)	61m(200ft)	30m(98ft)	15m(49ft)

PTZ

Pan/Tilt Range	Pan:0° ~355° ;Tilt:0° ~75° ;Rotation:0° ~355°

Intelligence

Event Trigger	Motion detection, Video tampering,Scene changing,Network disconnection,IP address conflict,Illegal acess,Storage anomaly
IVS	Tripwire, Intrusion

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	H.265: 12K ~ 6400Kbps H.264: 32K ~ 10240Kbps

Day/Night

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 Detection	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;HTTPs;TCP;ARP;RTSP;RTP;RTCP;UDP;SMTP; FTP;DHCP;DNS;DDNS;PPPoE;IPv4/v6;QoS;UPnP; NTP;Bonjour;IEEE 802.1x;Multicast;ICMP;IGMP; TLS
Interoperability	ONVIF Profile S&G, API
Streaming Method	Unicast / Multicast
Max. User Access	10 Users / 20 Users
Edge Storage	NAS Local PC for instant recording Micro SD Card 128GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS, DMSS
Smart Phone	IOS, Android

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	<9W(-ZS), <7W(-VFS)

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	IK10

Construction

Casing	Metal
Dimensions	φ122mm×88.9mm(4.80''x3.50'')
Net Weight	0.4Kg (0.88lb)
Gross Weight	0.54Kg(1.19lb)

Ordering Information

Type	Part Number	Description
2MP camera	DH-IPC-HDBW2231RP-ZS	2MP WDR IR Dome Network Camera, PAL
	DH-IPC-HDBW2231RN-ZS	2MP WDR IR Dome Network Camera, NTSC
	IPC-HDBW2231RP-ZS	2MP WDR IR Dome Network Camera, PAL
	IPC-HDBW2231RN-ZS	2MP WDR IR Dome Network Camera, NTSC
	DH-IPC-HDBW2231RP-VFS	2MP WDR IR Dome Network Camera, PAL
	DH-IPC-HDBW2231RN-VFS	2MP WDR IR Dome Network Camera, NTSC
	IPC-HDBW2231RP-VFS	2MP WDR IR Dome Network Camera, PAL
	IPC-HDBD2231RN-VFS	2MP WDR IR Dome Network Camera, NTSC
Accessories (optional)	PFA137	Junction box
	PFB203W	Wall mount
	PFA152-E	Pole mount
	PFB200C	In-celling Mount
	PFA200W	Rain shade

Accessories

Optional:

PFA137 Function Box   PFB203W Wall mount   PFA152-E Pole mount   PFB200C In-celling Box   PFA200W Rain shade

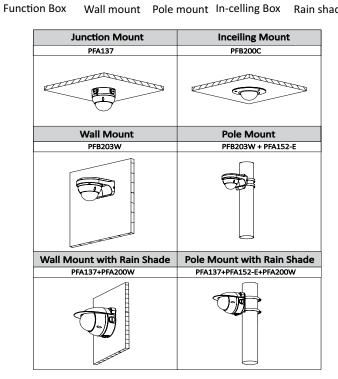| Junction Mount	Inceiling Mount
PFA137	PFB200C
Wall Mount	Pole Mount
PFB203W	PFB203W + PFA152-E
Wall Mount with Rain Shade	Pole Mount with Rain Shade
PFA137+PFA200W	PFA137+PFA152-E+PFA200W

Dimensions (mm/inch)

122.0 [4.8"]   88.9 [3.5"]   ⌀122.0 [⌀4.8"]   3-⌀4.5 [⌀0.18"]   ⌀110.0 [⌀4.33"]