# 12 Megapixel Rugged Fisheye IR IP Camera

# HFD8GR1

Honeywell is taking quality and reliability to the next level with the new equIP  $^{\circ}$  line of fisheye IP cameras. The Honeywell TDN ultra HD IR fisheye cameras offer incomparable picture clarity, an incredibly wide coverage area, hassle-free flexible system integration, and secure data transmission—and they install easily too!

#### Superior Image Quality

- Ultra HD 12 MP (4K) 25 fps image with a 1/1.7" 12 megapixel sensor
- Digital WDR (DWDR) ensures glare-free images
- True Day/Night provides vivid colour images by day and clear black-and-white images at night using a removable IR cut filter
- Image dewarping makes the fisheye output easy to view and scan for intruders
- Embedded PTZ control within the fisheye video allows users to control the part of the 360° view to focus on
- Excellent low-light performance with 3D noise reduction, saving storage and bandwidth together with H.265 Profile codec

### Flexible Surveillance Solution

- 1.98 mm, F2.8, fixed fisheye lens
- H.265, H.264 and MJPEG codec, triple stream support
- IR LEDs provide up to 8 m (25 ft) of illumination in dimly lit or nighttime scenes (depending on scene reflectance)
- Smart IR technology provides even distribution of IR
- Waterproof (IP67) and IK10 impact-resistant camera housing
- $-30\,^{\circ}\text{C}$  to  $60\,^{\circ}\text{C}$  ( $-22\,^{\circ}\text{F}$  to  $140\,^{\circ}\text{F}$ ) working temperature
- ONVIF Profile S and G compliant
- Security features include individual signed certificates and data encryption
- Cameras can be retrofitted on many existing NVR installations without requiring additional storage

### Easy to Install and Use

- Built-in PoE (Power over Ethernet) eliminates separate power supply and associated wiring; 12 V DC inputs where PoE power is unavailable
- Remote configuration through web client or from the NVR
- Included accessories: security screw driver, mounting screws, mounting template, mount adapter, IR led cover, and waterproof joint for network cable





### Onboard Video Storage

Supports up to 128 GB microSDHC (Class 10) card for local video storage when network is interrupted. Card not included.

### **Market Opportunities**

These fully featured attractive cameras are perfect for outdoor installations that require excellent picture quality at minimal bandwidth while offering maximum protection against dust, dirt, and water. Boasting a sleek modern design and offering the widest angle of view possible, the cameras are suited for a wide range of applications.

# FEATURES AND BENEFITS

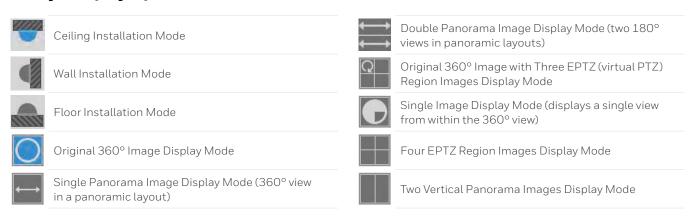
- 1/1.7" 12 megapixel progressive scan imager
- 16x digital zoom
- Digital WDR
- 8 m (25 ft) IR distance, depending on scene reflectance
- Wide horizontal angle of view at 185°
- Built-in cybersecurity hardware chipset
- Excellent low-light performance down to 0 lux BW (with IR LEDs on)
- Up to triple stream support
- 12 megapixel (4K) resolution at 25 fps
- 1.98 mm, F2.8, fixed fisheye lens
- Global language support with 15 languages for all QIGs, Web GUI, and online help
- Analytics event: audio detection
- Rugged outdoor housing with IP67 ingress protection rating and IK10 impact resistance rating
- ONVIF profile S and G compliant
- Onboard camera storage up to 128 GB microSD card (not included)
- Image dewarping and embedded PTZ controls for full monitoring of entire 360° fisheye view

# **HFD8GR1** Features

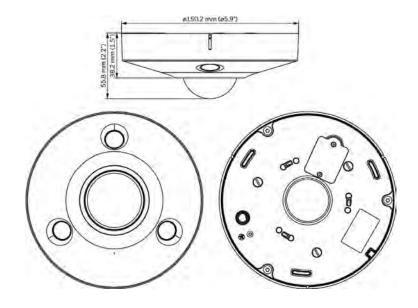
The camera can be configured to automatically detect and respond to events such as motion in the scene, alarm inputs, network failure, and/or camera tampering. Automated responses include: sending a notification through email, FTP, and/or HTTP; sending a still image of the event through email and/or FTP; and recording a video clip of the event to a configured microSDHC card. Setup can be done through the web client.



# Fisheye Display Options and Installation Modes



### **Dimensions**



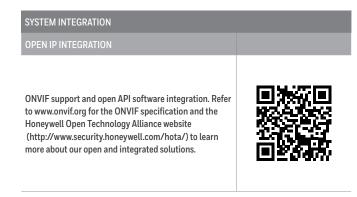
# **HFD8GR1** Technical Specifications

OPERATION	ΔI	
Video Standard NTSC/PAL		
		Progressive scan
Scanning System		1/1.7" 12 MP progressive CMOS
Image Sensor		4000 x 3000
Number of Pixels (H×V)		0.01 lux colour/0 lux BW with IR LEDs on @ F2.8
Minimum Illumination		_
S/N Ratio		50 dB
Electronic Shutter Speed		Auto, Manual, 1/3(4)–1/100 000 s
IR Distance		Up to 25 ft (8 m), depending on scene reflectance
IR Light Control		Smart IR/Manual/Off
Day/Night		Auto(ICR)/Colour/BW
Backlight Cor	•	BLC/HLC/DWDR
Wide Dynamic Range		Digital WDR (DWDR)
White Balance		Auto/Natural/Street Lamp/ Outdoor/Customize Region
Gain Control		Auto/Manual
Noise Reduction		3DNR
Privacy Masking		Up to 4 areas
Corridor Mode		Yes
Focus Mode		Manual
Lens		1.98 mm, fixed fisheye lens, F2.8
Horizontal Ar	ngle of View	185°
Audio/Two-Way		Line In/Out, 1 built-in mic
Alarm Input/Output		2/2
Ethernet		RJ-45 (10/100/1000Base-T)
IP SPECIFICA	ATIONS	
Video Compression		H.265/H.264/MJPEG Bit rate control (CBR and VBR)
B 1.11	4:3	12MP(4000×3000)/6MP(2880×2160)/3MP (2048×1536)/1.3MP(1280×960)
Resolution	Other	8MP (2880×2880) / D1 (704×576/704×480) / CIF (352×288/352×240)
Frame Rate	Main Stream	12MP (4000×3000) at up to 25 fps / 8MP (2880×2880) / 6MP (2880×2160) / 3MP (2048×1536) at up to 25/30 fps
	Sub Stream	D1/CIF up to 25/30 fps
	Triple Stream	1.3MP/D1 up to 25/30 fps
Dewarping Mode		Original, Panoramic, Double Panoramic, 1+3 EPTZ, 4 Pictures, 2 Pictures, Single
Audio Compression		G.711a/G.711Mu/AAC/G.726/MPEG2-Layer2/ G.722.1/G.729
Audio Stream		Full duplex, simplex
SD Card Function		Event trigger recording Continuous and scheduled recording Automatic recording when network fails
SD Card		Up to 128 GB microSDHC card Class 10 (not included)

IP SPECIFICATIONS (CONT'D)				
Protocols*	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, SSL, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, Bonjour, DNS, DDNS, IEEE 802.1X, QoS, NTP, IP Filter, Multicast, ONVIF			
Compatibility	ONVIF Profile S/G			
Max. User Access	20 users			
Supported Web Browsers	Internet Explorer (11.0+), Firefox, Chrome			
Supported OS	Windows 7 32-bit/64-bit, Windows 10			
Security	Multiple user access levels with enhanced password policy, IP filtering, IEEE 802.1X, strong digest authentication for access permission, HTTPS, TLS1.2 only, high-strength encrypted algorithm AES-256, SSH/Telnet closed, FTP disabled to reduce surface being attacked, PCI-DSS compliant, built-in cybersecurity hardware chipset			
Languages Supported	English, Arabic, Czech, Dutch, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Turkish			
ELECTRICAL				
Power Supply	PoE (802.3af) Class 0, 12 V DC			
Power Consumption	10 W max. (IR LEDs on)			
MECHANICAL				
Dimensions	ø150.2 mm × 55.8 mm (ø5.9 in × 2.2 in)			
Product Weight	1.1 lb (0.5 kg)			
Construction	Die-cast aluminum housing with powder coat			
Construction Colour	RAL9003 (White)			
ENVIRONMENTAL				
Temperature	-30 °C to 60 °C (-22 °F to 140 °F)			
Relative Humidity	Less than 95%, non-condensing			
Ingress Protection	IP67			
Impact Resistance	IK10			
REGULATORY				
Emissions	EN 55032, FCC Part 15B AS/NZS CISPR 22:2009+A1 (2010)			
Immunity	EN 50130-4			
Safety	EN 60950-1 UL Listed to UL/CSA 60950-1			
RoHS	EN 50581			

 $<sup>{}^{\</sup>star}$ Some development may be required in specific user cases to support some of these protocols in the field as they mature over time.

# **ORDERING**



ACCESSORIES		
MOUNTS		
HFG-WK	A	Wall Mount Bracket
HFG-PK	3	Pendant Mount Bracket
HB4G-PM	3	Pole Mount Adapter
HB34G-CM		Corner Mount Adapter

HONEYWELL DEVICE INTEGRATION		
MAXPRO® NVR FAMILY	Entry to Enterprise Level Network Video Recorders (version 4.0 and greater)	
MAXPRO® VMS FAMILY	Entry to Enterprise Level Network Video VMS (version R410 and greater)	
DVM	DVM R600.1 SP1	

ORDERING	
CAMERAS	
HFD8GR1	Network TDN Ultra HD IR Rugged Fisheye Camera, 1/1.7" CMOS, 12 MP, 1.98 mm Fixed Fisheye Lens, 3 IR LEDs, PoE, H.265

 ${\sf NOTE: Honeywell \, reserves \, the \, right, \, without \, notification, to \, make \, changes \, in \, product \, design \, or \, specifications.}$ 

### For more information

www.honeywell.com/security/uk

## **Honeywell Security and Fire**

Aston Fields Road Whitehouse Industrial Estate Runcorn Cheshire WA7 3DL UK

Tel: 08448 000 235 Fax: +44 (0)1928 754 050 www.honeywell.com

