# Honeywell

## H4D1FR1X

### equIP<sup>®</sup> SERIES 720p VFAI LENS TRUE DAY/NIGHT H.264 RUGGED INDOOR/OUTDOOR IR MINIDOME IP CAMERA

Honeywell's latest edition to the equIP<sup>®</sup> Series of IP-based products, the H4D1FR1X is a high definition, true day/night, rugged indoor/outdoor IR minidome network camera. Providing extremely crisp images at minimal bandwidth, the H4D1FR1X IK10 rated vandal-resistant camera offers 720p resolution at full frame rate, progressive scan technology, and 2D edge enhancement for outstanding picture clarity and definition. Digital Noise Reduction (DNR) provides significant storage savings without sacrificing image quality in low light and the 1/4 progressive scan CMOS sensor ensures accurate colour rendition through a wide variety of lighting conditions.

The H4D1FR1X supports dual video streams and multiple compression formats with rates up to 25 frames per second (30 fps for NTSC systems) The compression parameters for the two video streams are independently configurable. The primary stream is dedicated to H.264. The secondary stream can be configured for H.264 or MJPEG.

The H4D1FR1X integrates a camera and lens in an ultra-compact, single-piece, tamper-proof unit for fast and easy installation in any application. There are both surface and flush mount options and wall and pendant mount kits are available. With built-in low-current Power over Ethernet (IEEE 802.3af), power is supplied to the camera using standard network cabling, eliminating the need for a separate power supply and associated wiring. In retrofit situations where PoE support does not exist, the unit can also be powered directly from 24 V AC.

A 3-axis gimbal capable of 360° of pan, 75° of tilt, and 360° of horizontal rotation simplifies mechanical camera adjustment and the varifocal auto iris lens allows the field of view to be adjusted to suit the scene requirements. Additionally, an analogue video output is provided for aiming and focusing the camera during setup.

The H4D1FR1X supports the ONVIF specification for interoperability between network video products and comes with a powerful and intuitive web client for fine-tuning of the camera and the auto iris levels. This can also be performed from most DVR/NVR setup utilities.

#### **Market Opportunities**

The H4D1FR1X is perfect for installations that require excellent picture quality at minimal bandwidth. At three times the resolution of standard analogue cameras, yet with similar bandwidth requirements, the H4D1FR1X can be retrofitted on many existing DVR/NVR installations without requiring additional storage. Its discreet, vandal-resistant (IK10 rating) rugged design provides optimum performance for both indoor and outdoor applications.

#### Features

- Outstanding image quality, 720p (1280 × 720) resolution
- 25 fps (30 fps NTSC) progressive scan
- True Day/Night, VFAI lens with removable IR cut filter
- 3.3–12 mm VFAI lens
- 24 LEDs provide up to15 m of illumination, depending on scene reflectance
- Motion and tamper detection
- NTP time synchronisation support

- ONVIF (Profile S) support
- Dual digital video streams, independently configurable, H.264 and/or H.264/MJPEG
- Remote firmware update
- Supports both dynamic and static IP addresses
- Date and time stamp embedded into video stream
- Multiple browser support
- Includes advanced IP locator software to make system setup easy



Οηνιε

- Web server for remote setup of camera video and network parameters
- Choice of 24 V AC or PoE (IEEE 802.3af) power inputs
- Impact-resistant polycarbonate
  dome cover
- IP66 ingress protection rating
- Wall and pendant mount kits available
- Vandal resistant IK10 rating

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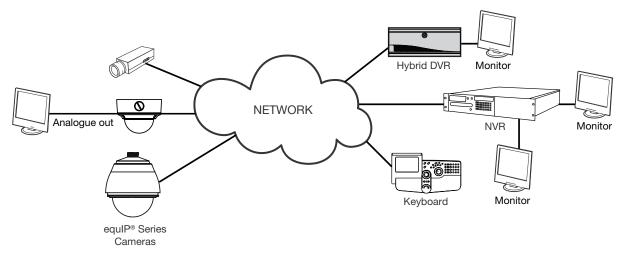
## H4D1FR1X

### **SPECIFICATIONS**

Like all cameras in the equIP<sup>®</sup> Series of IP-based products, the H4D1FR1X network camera uses Honeywell technology for camera video motion detection, tamper detection, remote firmware updating and for secure storage of all camera settings. Video motion detection recognises object motion within the field of view; then a simple on-screen notification alerts the user. Camera tamper detection notifies the user when a camera's field of view is altered, blinded, or blurred. This ensures the video's integrity and alerts the customer to either a live event or a system problem that is causing disruption to the video stream. Honeywell's technology also allows users to remotely upload firmware to the camera. Setup is quick and easy and can be customised through a web client or from an NVR or DVR. The built-in web server provides password-protected access to the camera's video and network setup.



#### System Diagram





# H4D1FR1X

### SPECIFICATIONS

Operational		
Video Standard	PAL/NTSC	
Scanning System	Progressive scan	
Image Sensor	1/4" CMOS	
Number of Pixels $(H \times V)$	1280 x 720	
Minimum Illumination (AGC max)	0.25 lux colour/0.22 lux BW @ 50 IRE, F1.6 0.11 lux colour/0.09 lux BW @ 30 IRE, F1.6 0 lux with IR LEDs on	
Automatic Lens Control	DC iris level 1-25	
Video Output (AUX)	1.0 Vp-p @ 75 ohms	
S/N Ratio	50 dB or more (AGC off)	
Auto Gain Control	Off/On, selectable (10-40 dB)	
Automatic Electronic Shutter	1/50–1/24,500 s (PAL) 1/60–1/24,500 s (NTSC)	
Lens Type	3.3–12 mm VFAI, DC drive, F1.6	
IR LEDs	850 nm, 24 LEDs	
IR Illumination Distance	Up to 15 m, depending on scene reflectance	
White Balance	AWC, AWC Push, Manual	
Electrical		
Input Voltage	24 V AC, PoE IEEE 802.3af	
Input Range	17–28 V AC	
Surge Suppression	1.5 kW transient	
Power Consumption	24 V AC: 6 W (max) PoE: PD Type 1 Class 2	
Mechanical		
Dimensions (W x H)	156 mm x 117.5 mm	
Weight	1.3 kg camera only	
Construction	Housing: Die cast aluminum Finish: Cool gray powder coat Dome Cover: Polycarbonate	
Connector	Video Output (AUX): 2-pin Molex connector Power Input: Removable screw block Network: RJ45 connector	

Environmental			
Environmental			
Temperature	Operating: -25°C to 55°C Storage: -40°C to 70°C		
Relative Humidity	10% to 85%, non-condensing		
Rating	IP66		
Vandal Resistant	IK10 rating		
IP Specifications			
Video Compression	Dual stream H.264 and MJPEG		
Primary Stream Resolution 1280 x 720 800 x 450 640 x 360 320 x 180	Bitrate H.264 (Typical)* 1.8 Mbps 1.2 Mbps 0.6 Mbps 0.21 Mbps	Frame Rate 25/30 25/30 25/30 25/30	Storage/ Day (GB) 18.98 12.65 6.33 0.89
Frame Rate (PAL/NTSC)	Up to 25/30 fps video in all resolutions		
Video Streaming	Dual streaming: H.264 and MJPEG Controllable frame rate and bandwidth Constant or variable bit rate		
Security	Multiple user access levels with password protection		
Video Access from Web Browser	Full control of all camera settings available to administrator		
Minimum Web Browsing Requirements	Pentium 4 CPU 3.1 GHz or faster 1 GB RAM (32-bit) or 2 GB RAM (64-bit) Windows XP SP3, Windows 2003 Server R2 (32-bit), Windows 7 (32-/64-bit), Windows 2008 Server (32-/64-bit), Windows 2008 R2 (64-bit) Internet Explorer 8 or 9, Mozilla Firefox or Google Chrome		
Installation and Management Maintenance	Honeywell IP Utility software identifies IP address, checks status of device, upgrades firmware over HTTP		
Supported Protocols	HTTP, TCP, RTSP, RTP, UDP, ARP, DNS, NTP, RTCP, FTP, ICMP, DHCP, Bonjour, IGMP, SSH		
Standards	ONVIF (Profile S)		
Regulatory			
Emissions	FCC, EN 55022		
Immunity	EN 50130-4		
Safety	EN 60950-1		

\* Actual bitrate is scene and motion dependent with H.264 stream

### H4D1FR1X

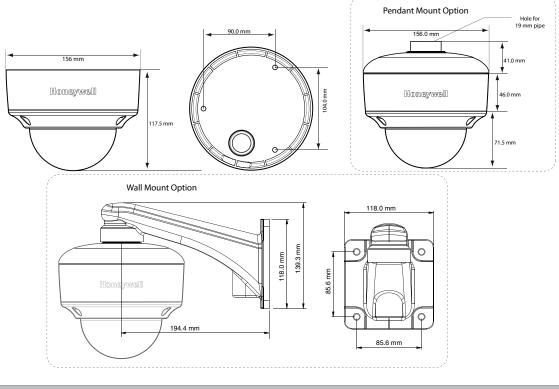
### ORDERING

#### System Integration

#### **Open IP Integration**

ONVIF support and open API for real interoperability between Honeywell and other manufacturers' IP-enabled security devices. Refer to the Honeywell Open Technology Alliance (http://www.security.honeywell.com/hota) to learn more about our open and integrated solutions.

Accessories		
Housing Mounts		
HD4CHIP-PK	Pendant Mount Bracket	
HD4CHIP-WK	Wall Mount Bracket	



Ordering	
H4D1FR1X	Network, Day/Night, Rugged Minidome, 1/4"Progressive Scan CMOS, 720p Resolution, 3.3–12 mm VFAI, 24 V AC or PoE IEEE 802.3af Class 2, H.264, PAL

NOTE: 'ONVIF' and OnviF are trademarks of ONVIF Inc.



For additional information, please visit www.honeywell.com/security/uk

#### Honeywell Security Group

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