

## H4D1FR1

www.honeywellvideo.com

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

Honeywell's latest edition to the equip® Series of IP-based products, the H4D1FR1 is a high definition, true day/night, rugged indoor/outdoor IR minidome network camera. Providing extremely crisp images at minimal bandwidth, the H4D1FR1 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 color rendition through a wide variety of lighting conditions.

The H4D1FR1 supports dual video streams and multiple compression formats with rates up to 30 frames per second (25 fps for PAL 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 H4D1FR1 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 also 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 analog video output is provided for aiming and focusing the camera during setup.

The H4D1FR1 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 H4D1FR1 is perfect for installations that require excellent picture quality at minimal bandwidth. At three times the resolution of standard analog cameras, yet with similar bandwidth requirements, the H4D1FR1 can be retrofitted on many existing DVR/NVR installations without requiring additional storage. Its discreet, vandal-resistant rugged design provides optimum performance for both indoor and outdoor applications.

#### Features

- Outstanding image quality, 720p (1280 × 720) resolution
- 30 fps (25 fps PAL) progressive scan
- True Day/Night, VFAI lens with removable IR cut filter
- 3.3–12 mm VFAI lens
- 24 LEDs provide up to 50 ft (15 m) of illumination, depending on scene reflectance
- Motion and tamper detection
- NTP time synchronization 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
- 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



HD



# H4D1FR1

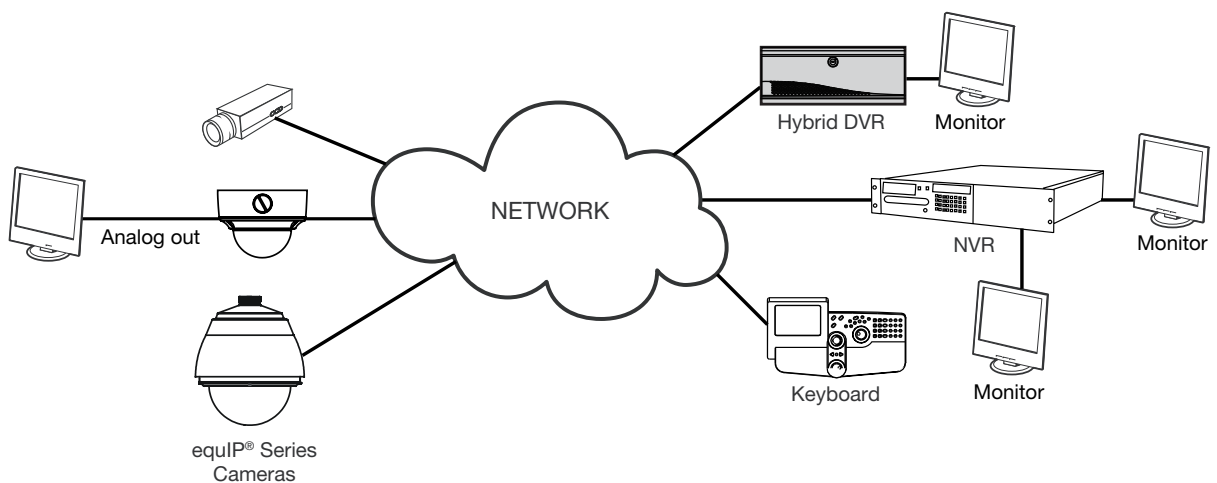
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## SPECIFICATIONS

Like all cameras in the equip<sup>®</sup> Series of IP-based products, the H4D1FR1 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 recognizes 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 customized 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



## SPECIFICATIONS

Operational		Environmental			
Video Standard	NTSC/PAL	Temperature	Operating: -13°F to 131°F (-25°C to 55°C) Storage: -40°F to 158°F (-40°C to 70°C)		
Scanning System	Progressive scan	Rating	IP66		
Image Sensor	1/4" CMOS	IP Specifications			
Number of Pixels (H x V)	1280 x 720	Video Compression	Dual stream H.264 and MJPEG		
Minimum Illumination (AGC max)	0.25 lux color/0.22 lux BW @ 50 IRE, F1.6 0.11 lux color/0.09 lux BW @ 30 IRE, F1.6 0 lux with IR LEDs on	Primary Stream Resolution	Bitrate H.264 (Typical)*	Frame Rate	Storage/Day (GB)
Automatic Lens Control	DC iris level 1-25	1280 x 720	1.8 Mbps	30/25	18.98
Video Output (AUX)	1.0 Vp-p @ 75 ohms	800 x 450	1.2 Mbps	30/25	12.65
S/N Ratio	50 dB or more (AGC off)	640 x 360	0.6 Mbps	30/25	6.33
Auto Gain Control	Off/On, selectable (10-40 dB)	320 x 180	0.21 Mbps	30/25	0.89
Automatic Electronic Shutter	1/60–1/24,500 s (NTSC) 1/50–1/24,500 s (PAL)	Frame Rate (NTSC/PAL)	Up to 30/25 fps video in all resolutions		
Lens Type	3.3–12 mm VFAI, DC drive, F1.6	Video Streaming	Dual streaming: H.264 and MJPEG Controllable frame rate and bandwidth Constant or variable bit rate		
IR LEDs	850 nm, 24 LEDs	Security	Multiple user access levels with password protection		
IR Illumination Distance	Up to 50 ft (15 m), depending on scene reflectance	Video Access from Web Browser	Full control of all camera settings available to administrator		
White Balance	AWC, AWC Push, Manual	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		
Electrical		Installation and Management Maintenance	Honeywell IP Utility software identifies IP address, checks status of device, upgrades firmware over HTTP		
Input Voltage	24 V AC, PoE IEEE 802.3af	Supported Protocols	HTTP, TCP, RTSP, RTP, UDP, ARP, DNS, NTP, RTCP, FTP, ICMP, DHCP, Bonjour, IGMP, SSH		
Input Range	17–28 V AC	Standards	ONVIF (Profile S)		
Surge Suppression	1.5 kW transient	Regulatory			
Power Consumption	24 V AC: 6 W (max) PoE: PD Type 1 Class 2	Emissions	FCC, EN 55022		
Mechanical		Immunity	EN 50130-4		
Dimensions (W x H)	6.1" x 4.6" x (156 mm x 117.5 mm)	Safety	EN 60950-1 North America ETL listed to UL/CSA 60950-1		
Weight	3.0 lb (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				

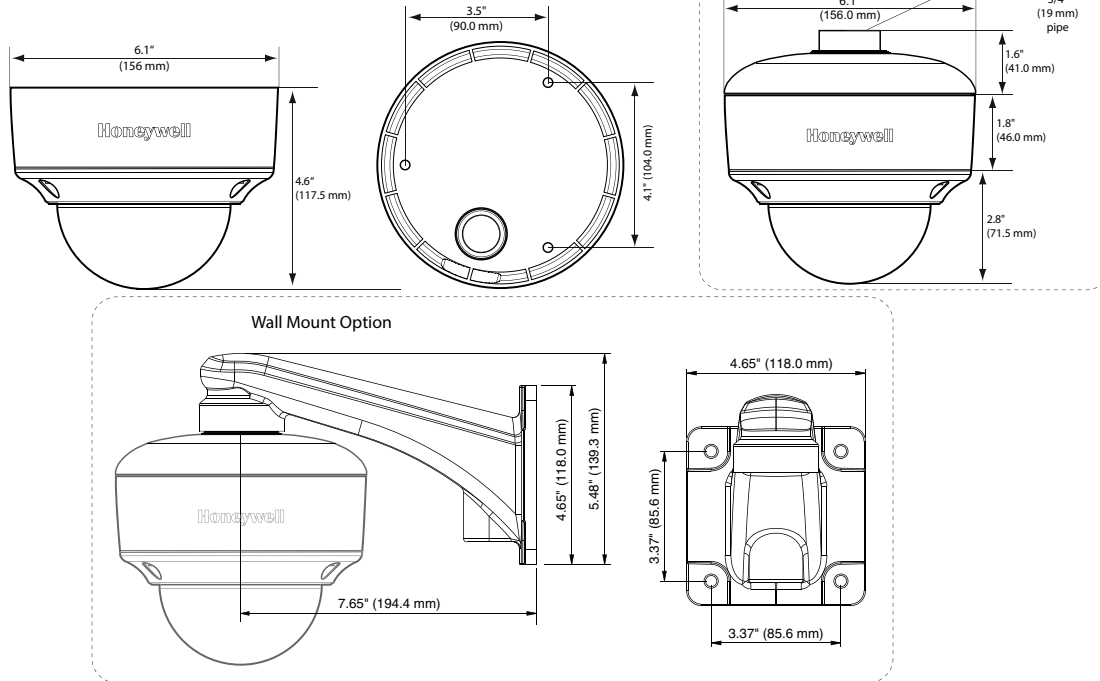
\* Actual bitrate is scene and motion dependent with H.264 stream

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## ORDERING

System Integration		Accessories	
<b>Open IP Integration</b>		<b>Housing Mounts</b>	
ONVIF support and open API for real interoperability between Honeywell and other manufacturers' IP-enabled security devices. Refer to the Honeywell Open Technology Alliance ( <a href="http://www.security.honeywell.com/hota">http://www.security.honeywell.com/hota</a> ) to learn more about our open and integrated solutions.		HD4CHIP-PK	Pendant Mount Bracket
		HD4CHIP-WK	Wall Mount Bracket



Ordering	
H4D1FR1	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 1, H.264, NTSC
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 1, H.264, PAL

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

### For more information:

www.honeywell.com/security

### Automation and Control Solutions

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