

## H4D1F

www.honeywellvideo.com

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

Honeywell's latest addition to the equiP® Series of IP-based products, the H4D1F is a high definition, True Day/Night rugged indoor/outdoor fixed minidome network camera. This ultra compact and vandal-resistant camera provides extremely crisp images at minimal bandwidth. The H4D1F provides 720p resolution at full frame rate. Progressive scan technology and 2D edge enhancement provide outstanding clarity and definition. Digital Noise Reduction (DNR) results in significant storage savings without sacrificing image quality in low light. The 1/4" progressive scan CMOS sensor offers the latest in digital video surveillance technology with accurate color rendition through a wide variety of lighting conditions. The H4D1F also supports the ONVIF Profile S specification for interoperability between network video products.

The H4D1F integrates a camera and lens in an ultra compact, single piece, tamper-proof unit for fast and easy installation in any application. The camera is designed to be surface mounted. Wall and pendant mount kits are also available.

In addition to the low-light color performance, the camera will automatically switch to black and white. In this mode, lighting can be complemented with infrared for discreet/covert low-light surveillance with exceptional monochrome images.

A 3D axis gimbal capable of 360° of pan, 180° of tilt and 360° of horizontal rotation simplifies mechanical camera adjustment. The varifocal auto iris lens allows the field of view to be adjusted to suit the scene requirements.

A powerful and intuitive web client allows fine tuning of the camera and the auto iris levels. This can also be performed from most DVR/NVR setup utilities.

The H4D1F supports dual video streams and multiple compression formats with frame 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 H4D1F features analog video out for aiming and focusing during setup.

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 situations where PoE support is not available, the unit can also be powered directly from 24 V AC.

#### Market Opportunities

The H4D1F is perfect for installations where excellent picture clarity at minimal bandwidth is required. At three times the resolution of standard analog cameras, yet with similar bandwidth requirements, the H4D1F can be retrofitted on many existing DVR/NVR installations without requiring additional storage. Its discreet, vandal-resistant, outdoor design provides maximum protection against dust, dirt and water and provides optimum performance for both indoor and outdoor applications.

#### Features

- Outstanding image quality, 720p (1280 x 720) resolution
- 30 fps (25 fps PAL) progressive scan
- True Day/Night, VFAI lens with removable IR cut filter
- Camera tamper detection
- Video motion detection
- NTP time synchronization support
- Wall and pendant mount kits available
- 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/time stamp embedded into video stream
- Multiple browser support
- Includes advanced IP locator software to make system setup easy
- Embedded web server for remote setup of camera video and network parameters
- Choice of 24 V AC or PoE IEEE 802.3af power inputs
- Supports input and output alarm contacts
- Supports bidirectional audio
- Rugged polycarbonate dome
- IP66, IK10

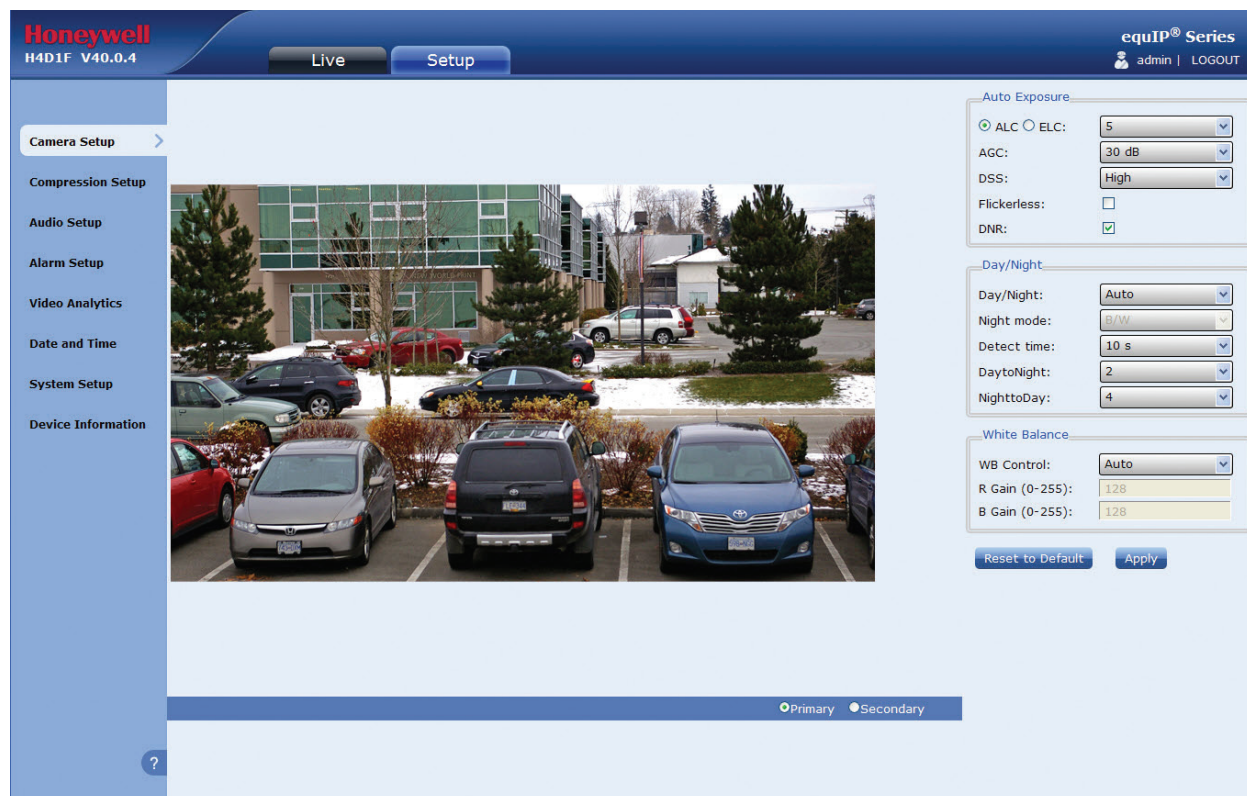


HD

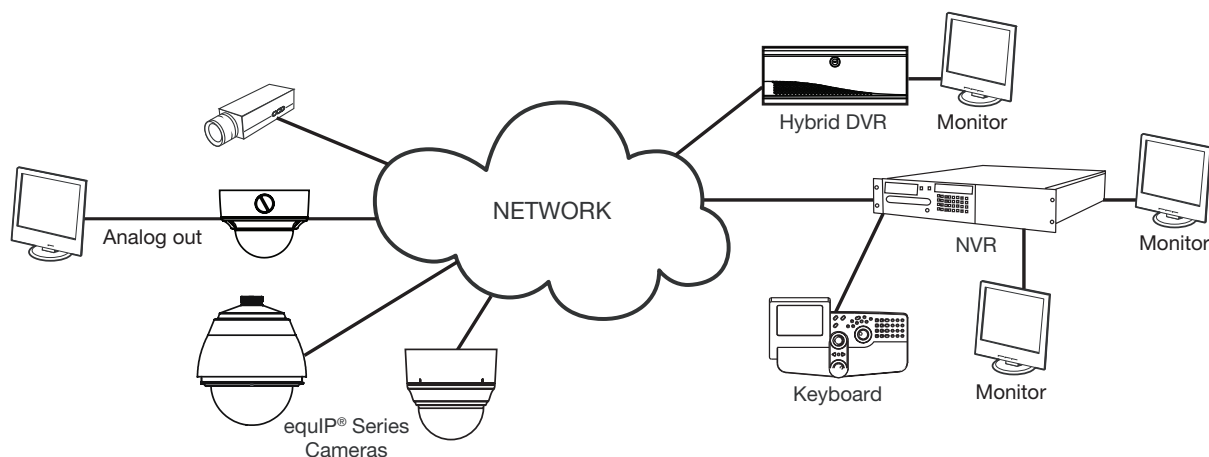


## SPECIFICATIONS

Like all cameras in the equip® Series of IP-based products, the H4D1F 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			
Video Standard	NTSC/PAL		
Scanning System	Progressive scan		
Image Sensor	1/4" CMOS		
Number of Pixels (HxV)	1280 x 720		
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		
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	1/60-1/24,500 sec (NTSC) 1/50-1/24,500 sec (PAL)		
Lens Type	True Day/Night (TDN) 3.3-12 mm Varifocal Auto Iris, F1.6 (H4D1F1) 2.5-6 mm Varifocal Auto Iris, F1.2 (H4D1F2) 10-28 mm Varifocal Auto Iris, F1.8 (H4D1F3)		
Angle of View		Wide	Tele
H4D1F1 (3.3-12 mm VFAL lens)	Horizontal	68.5°	19.1°
	Vertical	36.8°	10.8°
H4D1F2 (2.5-6 mm VFAL lens)	Horizontal	87.9°	37.9°
	Vertical	48.6°	21.3°
H4D1F3 (10-28 mm VFAL lens)	Horizontal	21.9°	8.1°
	Vertical	12.1°	4.6°
White Balance	AWC, AWC Push, Manual		
Audio/Two-Way	Line in/out		
Electrical			
Input Voltage	24 V AC, PoE IEEE 802.3af		
Input Range	17–28 V AC		
Surge Suppression	1.5 kW transient		
Power Consumption	5.0 W (max) 24 V AC PoE: PD Type 1, Class 1		
Mechanical			
Dimensions (W x H)	6.1" x 4.6" (154.9 mm x 117.1 mm)		
Weight	3.0 lb (1.3 kg) camera only		
Construction	Housing: Die cast Aluminum Finish: Cool Gray Powder Coat Dome: Polycarbonate		
Connector	Video Output (AUX): 2-pin Molex connector Power Input: Removable screw block Network: RJ45 connector Alarm I/O: Removable screw block Audio In: Removable screw block Audio Out: Removable screw block		

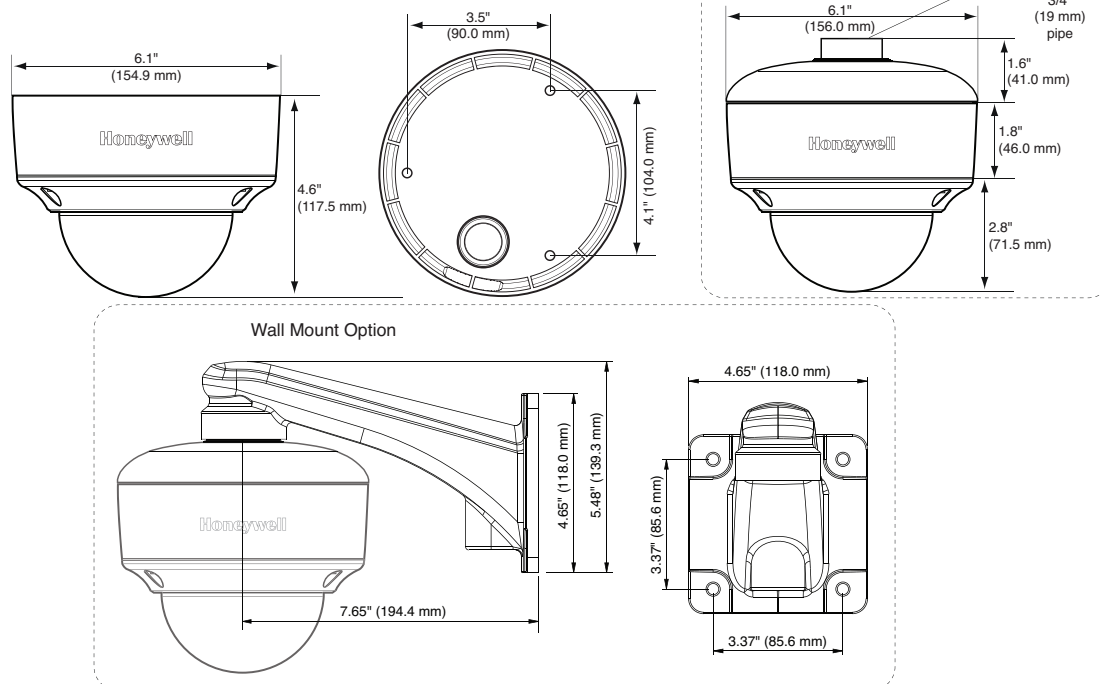
Environmental				
Temperature	Operating: -22°F to 140°F (-30°C to 60°C) Storage: -40°F to 158°F (-40°C to 70°C)			
Rating	IP66, IK10			
IP Specifications				
Video Compression	Dual stream H.264 and/or H.264/MJPEG			
Primary Stream Resolution	Bitrate H.264 (Typical)*	Frame Rate	Storage/Day (GB)	
	1280 x 720	1.8 Mbps	30/25	18.98
	800 x 450	1.2 Mbps	30/25	12.65
	640 x 360	0.6 Mbps	30/25	6.33
	320 x 180	0.21 Mbps	30/25	0.89
Frame Rate NTSC/PAL	Up to 30/25 fps video in all resolutions			
Video Streaming	Dual streaming: H.264 and/or H.264/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 IV 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 Vista SP1, Windows 2008 R2 (64-bit) Internet Explorer 8 or 9 Mozilla Firefox® and Google Chrome			
Installation and Management Maintenance	Honeywell IP Utility software identifies the IP address, checks status of device, firmware upgrades over HTTP			
Supported Protocols**	HTTP, TCP, RTSP, RTP, UDP, ARP, DNS, NTP, RTCP, FTP, ICMP, DHCP, Bonjour, IGMP, SSH			
Standards	ONVIF Profile S support			
Regulatory				
Emissions	FCC Part 15B, CE (EN 55022)			
Immunity	CE (EN 50130-4)			
Safety	EU: EN 60950-1 North America ETL listed to UL/CSA 60950-1			

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

\*\* Some development may be required in specific user cases to support some of these protocols in the field as naturally the protocols will mature over time.

## SPECIFICATIONS

System Integration		Accessories	
Open IP Integration		Housing and Mounts	
ONVIF support and open API for software integration. Refer to <a href="http://www.onvif.org">www.onvif.org</a> for the ONVIF specification and 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	
H4D1F1	Network TDN Rugged Fixed Minidome Camera, 1/4" Progressive Scan, CMOS, 720p Resolution, 3.3-12 mm VFAI Lens, 24 V AC or PoE IEEE 802.3af, H.264, NTSC
H4D1F1X	Network TDN Rugged Fixed Minidome Camera, 1/4" Progressive Scan, CMOS, 720p Resolution, 3.3-12 mm VFAI Lens, 24 V AC or PoE IEEE 802.3af, H.264, PAL
H4D1F2	Network TDN Rugged Fixed Minidome Camera, 1/4" Progressive Scan, CMOS, 720p Resolution, 2.5-6 mm VFAI Lens, 24 V AC or PoE IEEE 802.3af, H.264, NTSC
H4D1F2X	Network TDN Rugged Fixed Minidome Camera, 1/4" Progressive Scan, CMOS, 720p Resolution, 2.5-6 mm VFAI Lens, 24 V AC or PoE IEEE 802.3af, H.264, PAL
H4D1F3	Network TDN Rugged Fixed Minidome Camera, 1/4" Progressive Scan, CMOS, 720p Resolution, 10-28 mm VFAI Lens, 24 V AC or PoE IEEE 802.3af, H.264, NTSC
H4D1F3X	Network TDN Rugged Fixed Minidome Camera, 1/4" Progressive Scan, CMOS, 720p Resolution, 10-28 mm VFAI Lens, 24 V AC or PoE IEEE 802.3af, H.264, PAL

**NOTE:** Honeywell reserves the right, without notification, to make changes in product design or specifications.

### For more information:

[www.honeywell.com/security](http://www.honeywell.com/security)

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