

## HCW1F

www.honeywellvideo.com

### equiP® SERIES 720p TRUE DAY/NIGHT WIDE DYNAMIC H.264 INDOOR BOX IP CAMERA

Honeywell's latest addition to the equiP® Series of IP-based products, the HCW1F is a high definition Wide Dynamic, True Day/Night network camera that offers the latest in digital video surveillance. The HCW1F 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 1/3" progressive scan CMOS sensor offers the latest in digital video surveillance technology with accurate color rendition through a wide variety of lighting conditions. The HCW1F supports the ONVIF specification for interoperability between network video products.

The HCW1F true day/night camera adapts to varying lighting conditions to ensure the highest picture quality even in extreme low-light conditions. When the light level drops too low for accurate video identification in color, the camera moves the IR cut filter out of the optical path and then switches to black and white video to capture more detail using the increased sensitivity of the CMOS sensor to IR light. In high contrast lighting conditions, the HCW1F delivers higher quality images and significantly better dynamic range (>100 dB) than conventional IP cameras. Designed for environments with difficult lighting, the HCW1F camera offers a unique solution to capture the whole picture regardless of lighting condition or application.

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

The HCW1F 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 HCW1F features analog video out for aiming and focusing during setup.

The HCW1F has built-in Power over Ethernet (IEEE 802.3af), which allows power to be 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 HCW1F is a network surveillance solution designed for object recognition that is required in locations where variable and low light conditions exist. Setup is quick and easy and can be customized through a web client or from an NVR. This provides optimum performance for indoor applications, as well as outdoor applications when using an environmental housing.

#### Features

- Outstanding image quality, 720p (1280 × 720) resolution
- 30 fps (25 fps PAL) progressive scan
- H.264 and MJPEG compression
- ONVIF support
- Camera tamper detection
- NTP time synchronization support
- Dynamic Range: 115 dB
- Supports both dynamic and static IP addresses
- Variable day/night threshold setting to accommodate switching to black and white images in low light
- Dual digital video streams, independently configurable, H.264 and/or H.264/MJPEG
- Remote firmware update
- Date/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
- Multiple levels of password protected remote access prevents unauthorized users from altering system settings
- Supports bidirectional audio



Lens sold separately

HD

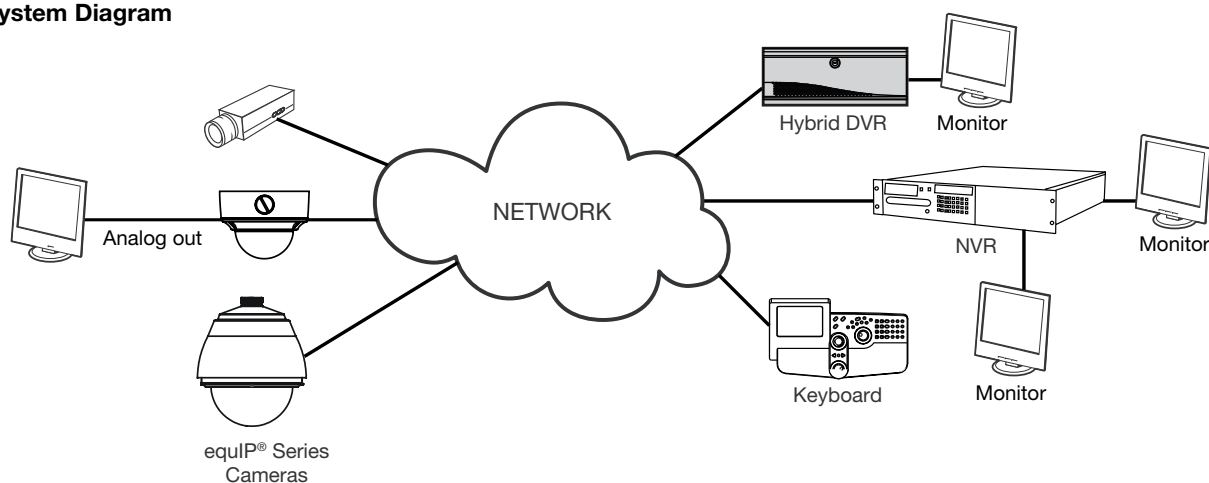


## SPECIFICATIONS

Like all cameras in the equip<sup>®</sup> Series of IP-based products, the HCW1F 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. The built-in web server provides password-protected access to the camera's video and network setup.



## System Diagram



## SPECIFICATIONS

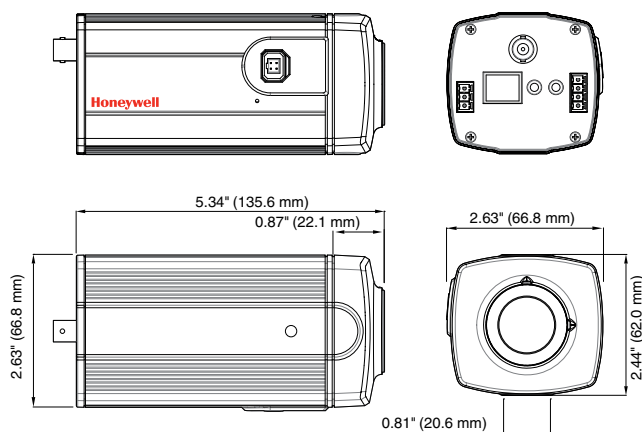
Operational	
Video Standard	NTSC/PAL
Scanning System	Progressive scan
Image Sensor	1/3" CMOS
Number of Pixels (H×V)	1280 x 720
Minimum Illumination	0.1 lux color/0.07 lux BW @ 50 IRE, F1.2
Video Output (AUX)	1.0 Vp-p @ 75 ohms
Dynamic Range	115 dB
S/N Ratio	50 dB or more (AGC off)
Auto Gain Control	Off/On, selectable (20-40 dB)
Automatic Electronic Shutter	1/30-1/87,000 sec (NTSC and PAL)
White Balance	Auto, Manual, WBC Push
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 2
Mechanical	
Dimensions (W x H)	5.34" x 2.44" (135.6 mm x 62.0 mm)
Weight	1.1 lb (0.5 kg) camera only
Construction	Housing: Aluminum Finish: Cool Gray Powder Coat
Camera Mount	1/4-20 UNC mounting ring
Connector	Video Output: BNC connector Lens: 4 Pin Connector Power Input: Removable screw block Network: RJ45 connector Alarm I/O: Removable screw block Audio In: 3.5 mm mono phone jack Audio Out: 3.5 mm mono phone jack

Environmental			
Temperature	Operating: 14°F to 122°F (-10°C to 50°C) Storage: -4°F to 140°F (-20°C to 60°C)		
Relative Humidity	0% to 85%, non-condensing		
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)*	Frame Rate	Storage/Day (GB)
	2.7Mbps	30/25	28.48
	1.8 Mbps	30/25	18.98
	0.9 Mbps	30/25	9.49
	0.315 Mbps	30/25	3.32
Frame Rate NTSC/PAL	Up to 30/25 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 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, discovers cameras, supports firmware upgrades		
Supported Protocols	HTTP, TCP, RTSP, RTP, UDP, ARP, DNS, NTP, RTCP, FTP, ICMP, DHCP, Bonjour, IGMP, SSH		
Standards	ONVIF support		
Regulatory			
Emissions	FCC, CE (EN55022)		
Immunity	CE (EN50130-4)		
Safety	EU: EN60950-1 North America ETL listed to UL/CSA 60950-1		

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

## SPECIFICATIONS

System Integration
<b>Open IP Integration</b>
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.



Accessories	
Housing and Mounts	
HBC5WT	Wall/ceiling mount bracket
HHCWM	Environmental housing **
HHCWM2	Environmental housing with heater/blower **
Recommended Lens Options *	
HLD3V8MPD	3-8 mm high definition megapixel lens
HLM45V13MPD	4.5-13.2 mm high definition megapixel lens

### Notes:

\* Only a high definition megapixel lens should be used with the HCW1F camera.

\*\* When the HCW1F is installed in the HHCWM or the HHCWM2 environmental housing, the finished assembly performs well in environments ranging from 5°F to 140°F (-15°C to 60°C) (HHCWM) or -40°F to 140°F (-40°C to 60°C) (HHCWM2).

Ordering	
HCW1F	Network TDN Box Camera, 1/3" Progressive Scan, CMOS, Wide Dynamic 720p Resolution, 24 V AC or PoE IEEE 802.3af, H.264, NTSC
HCW1FX	Network TDN Box Camera, 1/3" Progressive Scan, CMOS, Wide Dynamic 720p Resolution, 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)

### Automation and Control Solutions

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