

## HCD2F

www.honeywellvideo.com

## equip® SERIES 1080p TRUE DAY/NIGHT H.264 INDOOR BOX IP CAMERA

Honeywell's latest addition to the equIP® Series of IP-based products, the HCD2F is a high definition, True Day/Night network camera that offers the latest in digital video surveillance. The HCD2F provides 1080p (1920 x 1080) 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 1/2.7" CMOS network camera combines world-class imaging and camera technology with the equIP Series IP networking technology, providing streaming H.264 and MJPEG images with frame rates up to 30 frames per second (25 fps for PAL systems). The HCD2F supports the ONVIF Profile S specification for interoperability between network video products.

The HCD2F 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 CMOS sensor's increased sensitivity to IR light.

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

The HCD2F supports dual video streams and multiple compression formats. 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 HCD2F features analog video out for aiming and focusing during setup.

The HCD2F 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 HCD2F is a network surveillance solution designed for object recognition 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. The HCD2F provides optimum performance for indoor applications, as well as outdoor applications when using an environmental housing.

### **Features**

- Outstanding image quality, 1080p (1920 × 1080) resolution
- 30 fps (25 fps PAL) progressive scan
- ONVIF Profile S support
- Camera tamper detection
- Video motion detection
- NTP time synchronization support
- 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
- Supports both dynamic and static IP addresses
- 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
- Multiple levels of password protected remote access prevents unauthorized users from altering system settings
- Supports bidirectional audio

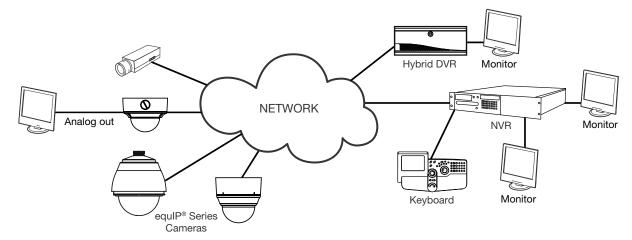


## **SPECIFICATIONS**

Like all cameras in the equIP® Series of IP-based products, the HCD2F 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	1/2.7" CMOS	
Number of Pixels (H×V)	1920 × 1080	
Minimum Illumination (AGC max)	0.18 lux color/0.15 lux BW @ 50 IRE, F1.2 0.11 lux color/0.09 lux BW @ 30 IRE, F1.2	
Automatic Lens Control	DC Iris Level 1-25	
Video Output (AUX)	1.0 <i>V</i> p-p @ 75 ohms	
S/N Ratio	50 dB or more (AGC off)	
Auto Gain Control	Off/On, selectable (20-40 dB)	
Automatic Electronic Shutter	1/30-1/130,000 sec (NTSC) 1/25-1/130,000 sec (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) Dimensions do not include a lens	
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: -40°F to 158°F (-40°C to 70°C)			
Relative Humidity	0% to 85%, non-condensing			
IP Specifications	Specifications			
Video Compression	Dual stream H.264 and/or H.264/MJPEG			
Primary Stream Resolution 1920 x 1080 1280 x 720 800 x 450 640 x 360 320 x 180	Bitrate H.264 (Typical)* 3.0 Mbps 1.4 Mbps 0.75 Mbps 0.4 Mbps 0.2 Mbps	30/25 30/25 30/25 30/25 30/25 30/25	Storage/ Day (GB) 31.6 14.8 7.91 4.22 2.11	
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, discovers cameras, supports firmware upgrades			
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			

<sup>\*</sup> Actual bitrate is scene and motion dependent with H.264 stream.

<sup>\*\*</sup> 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 Open IP Integration

ONVIF support and open API for software integration. Refer to www.onvif.org for the ONVIF specification and the Honeywell Open Technology Alliance [http://www.security.honeywell.com/hota/] to learn more about our open and integrated solutions.

		Honeywell	
		5.34" (135.6 mm) 0.87" (22.1 <u>mm)</u>	2.63" (66.8 mm)
2.63" (66.8 mm)	0		2.44" (62.0 mm)
			0.81" (20.6 mm)

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

#### Notes:

- \* Only a high definition megapixel lens should be used with the HCD2F camera.
- \*\* When the HCD2F 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) for HHCWM, or -40°F to 140°F (-40°C to 60°C) for HHCWM2.

Ordering	
HCD2F	Network TDN Box Camera, 1/2.7" Progressive Scan, CMOS, 1080p Resolution, 24 V AC or PoE IEEE 802.3af, H.264, NTSC
HCD2FX	Network TDN Box Camera, 1/2.7" Progressive Scan, CMOS, 1080p 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

## **Automation and Control Solutions**

Honeywell Security Products Americas 2700 Blankenbaker Pkwy, Suite 150 Louisville, KY 40299 1.800.323.4576 www.honeywell.com

