

## 25x Zoom IR WDR PTZ IP Cameras

HDZP252DI

Honeywell's latest HDZ PTZ is part of the growing line of IP-based products. The high definition, True Day/Night WDR PTZ cameras provide extremely crisp video with up to 2 million effective pixels and 25x optical zoom for continuous surveillance in many security applications.

### Superior Image Quality

- Full HD 1080p resolution, 50/60 fps image with a 1/2.8" 2 megapixel sensor
- True WDR 120 dB ensures glare-free images
- True Day/Night provides vivid color images by day and clear black-and-white images at night with ICR (Infrared Cut Filter Removal)
- Excellent low-light performance with 3D noise reduction, saving storage and bandwidth together with H.265 codec

### Flexible Surveillance Solution

- 4.8–120 mm, F1.6–F4.4, 25x optical zoom lens with 360° continuous rotation for the flexibility to clearly view the target area with desired width and depth
- H.265, H.264 and MJPEG codec, triple stream support
- Six IR LEDs provide up to 328 ft. (100 m) of illumination in dimly lit or nighttime scenes (depending on scene reflectance)
- Water resistant (IP66) camera housing
- -40°F to 158°F (-40°C to 70°C) working temperature
- Built-in Analytics in the camera, such as face detection
- Security features include individual signed certificates and data encryption

### Onboard Video Storage

- Supports up to 128 GB microSDHC card for local video storage on events, continuous, or schedule, or with network interruption. Card not included



### Easy to Install and Use

- Built-in High PoE (Power over Ethernet) eliminates separate power supply and associated wiring; 12 VDC input where PoE power is unavailable
- ONVIF Profile S and G compliant
- Remote configuration, motorized pan, tilt and zoom adjustments and auto focus through web client

### Market Opportunities

The combination of the latest digital technology and advanced video processing makes HDZ ideally suited for large-scale surveillance in cities, roadways, airports, government facilities, schools and campuses, industrial environments and anywhere detailed surveillance is essential.

## FEATURES AND BENEFITS

- |   |  |  |   |  |
|---|--|--|---|--|
| <ul style="list-style-type: none"><li>• 4.8–120 mm, F1.6–F4.4, 25x optical zoom lens</li><li>• 1/2.8" progressive scan image sensor</li><li>• Up to 50/60 fps primary stream. Up to 25/30 fps secondary streams</li></ul> | <ul style="list-style-type: none"><li>• Up to triple stream support</li><li>• Ultra-low light performance</li><li>• 328 ft. (100 m) IR distance, depending on scene reflectance</li><li>• True WDR: 120 dB</li></ul> | <ul style="list-style-type: none"><li>• Excellent low light performance with down to 0 lux BW (with IRs on)</li><li>• Multiple, selectable compression formats (H.265/H.264/MJPEG)</li></ul> | <ul style="list-style-type: none"><li>• Built-in Analytics, including Face detection</li><li>• Automatically restores to previous PTZ and lens position after power failure</li><li>• Choice of 12 VDC or PoE+ power inputs</li></ul> | <ul style="list-style-type: none"><li>• On board camera storage: up to 128 GB microSD card (not included)</li><li>• ONVIF profile S and G compliant</li><li>• Water resistant IP66 ingress protection rating</li></ul> |
|---|--|--|---|--|

# HDZ Series – 25x Zoom IR WDR IP PTZ Cameras Technical Specifications

CAMERA	
IMAGE SENSOR	1/2.8" Exmor CMOS
OPTICAL ZOOM	25x
DIGITAL ZOOM	16x
NUMBER OF PIXELS (H × V)	1920 × 1080 (1080p)
WDR	120 dB
S/N RATIO	> 50 dB (AGC off)
MINIMUM ILLUMINATION	0.005 lux (color)/0 lux (B/W) @ F1.6 (with IR LEDs on)
FOCAL LENGTH	4.8 mm – 120 mm
MAX APERTURE	F1.6 – F4.4
FOCUS MODE	Manual/Auto
IR DISTANCE	Up to 328 ft. (100 m), depending on scene reflectance
ANGLE OF VIEW	H: 59.2° – 2.4°
WHITE BALANCE	Auto/Indoor/Outdoor/ATW/Manual
EXPOSURE MODE	Iris Priority/Shutter Priority/Gain Priority/Manual
ELECTRONIC SHUTTER	1/1 to 1/30,000 sec
BACKLIGHT COMPENSATION	BLC/HLC/WDR (120 dB)
DEFOG	On/Off
NOISE REDUCTION	2D/3D
DAY/NIGHT	Auto (ICR)/Color/BW
OPERATION	
PAN TRAVEL	360° endless
TILT TRAVEL	-15° to 90°, auto flip 180°
MANUAL PAN SPEED	Up to 200°/s
MANUAL TILT SPEED	Up to 120°/s
PRESETS	300
PRESET SPEED	Pan: Up to 240°/s; Tilt: Up to 200°/s
TOURS	8
AUTO PAN/SCAN	1 / 1
PATTERN	5
PRIVACY MASKS	24
MOTION DETECTION	On/Off
IMAGE ROTATION	Flip
AUDIO IN/OUT	1 / 1
ALARM INPUT/OUTPUT	2 / 1
VIDEO ANALYTICS	Face detection
EVENT	Motion Detect; Audio Detect; SD card capacity warning
EVENT NOTIFICATION	Record (SD card and FTP), Relay output, Email, Preset, Tour, Pattern, Snapshot
ELECTRICAL	
POWER SOURCE	12 VDC ± 25%, 3A PoE+ (802.3at) class 4
POWER CONSUMPTION	13 W; 20 W max (IR LEDs on)

MECHANICAL	
DIMENSIONS	Ø6.3" × 11.6" (Ø160.0 mm × 295.0 mm)
PRODUCT WEIGHT	8.8 lb. (4.0 kg)
CONNECTORS	Power input: Bare wire with connectors Network: RJ45 connector Alarm I/O: Twisted wire (2 in/1 out) Audio I/O: Twisted wire (1 in/1 out)
CONSTRUCTION MATERIAL	Aluminum
CONSTRUCTION COLOR	White (RAL CODE 9003)
ENVIRONMENTAL	
OPERATING TEMPERATURE	-40°F to 158°F (-40°C to 70°C)
RELATIVE HUMIDITY	Less than 90%, non-condensing
WATERPROOF STANDARD	IP66
IP SPECIFICATIONS	
VIDEO COMPRESSION	H.265 / H.264 / MJPEG
VIDEO STREAMING	<b>Primary Stream:</b> 1080p/720p @ 60/50 fps <b>2nd Stream:</b> D1/CIF @ 30/25 fps <b>3rd Stream:</b> 720p/D1/CIF @ 30/25 fps
VIDEO RESOLUTION	1080p (1920×1080p) / 720p (1280×720) / D1 (704×576/704×480) / CIF (352×288/352×240)
AUDIO COMPRESSION	G.711a/G.711Mu/AAC/G.726
AUDIO STREAM	Full-duplex, Simplex
INTERFACE	RJ-45, 10/100 Mbps Ethernet
SUPPORTED PROTOCOLS*	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, SSL, FTP, SMTP, DHCP, PPPoE, UPnP, SNMP, Bonjour, DDNS, IEEE 802.1x, QoS, NTP, IP Filter, ONVIF
SECURITY	User account and password protection, HTTPS, IP Filter, IEEE 802.1x, Digest authentication, User access log, Hardware security chipset protection
MAXIMUM USERS ACCESS	20 users
MICRO SD	Support for microSD up to 128 GB (card not included)
MICRO SD FUNCTION	Event trigger recording Continuous and scheduled recording Automatic recording when network fails
SUPPORTED WEB BROWSERS	Internet Explorer® (11.0+)
SUPPORTED OS	Windows® 7 32-bit/64-bit
COMMUNICATION	ONVIF Profile S and G
REGULATORY	
EMISSIONS	FCC Part 15B, EN55032
IMMUNITY	EN55024, EN50130-4
SAFETY	EU: EN60950-1 North America UL listed to UL/CSA 60950-1
ROHS	EN50581: 2012

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

## PERFORMANCE LITE IP CAMERAS 2MP IP IR EYEBALL CAMERA

HIE2PI / HIE2PIV

Honeywell's new Performance Lite IP camera series is aimed to provide high quality surveillance as an affordable offering for the small and medium businesses including small retail shops, gyms, schools, residential homes, etc.

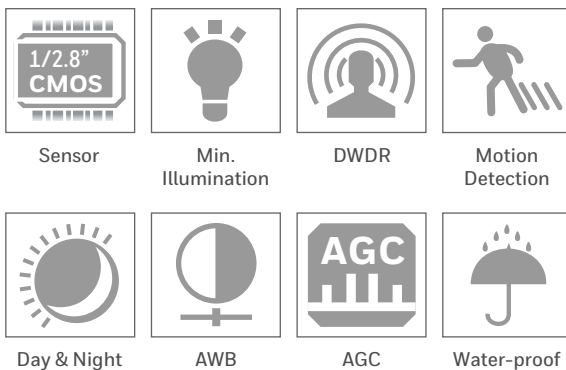
The new series includes 2MP IR cameras in both eyeball and bullet configurations with fixed and variable lens options to cater to all kinds of customer applications. The cameras come with IR LEDs so as to provide effective and efficient surveillance even during the night time. The cameras are IP66 rated that makes them resilient for outdoor applications as well.



HIE2PI



HIE2PIV



## KEY FEATURES

- 2MP full real time recording
- Max resolution : 1920 x 1080
- True day night function
- Upto 30m IR distance
- 3D DNR, DWDR
- IP 66 certified
- Support triple streams
- Onvif Profile S/G compliant

# PERFORMANCE LITE IP CAMERAS

HIE2PI / HIE2PIV

## SPECIFICATIONS

CAMERA	HIE2PI	HIE2PIV
Image Sensor	1/2.8 CMOS	
Number of Pixels (H x V)	1920 x 1080	
Electronic Shutter	1/25s ~ 1/ 100000s	
Iris	Fixed Iris	
Min Illumination	0.1 lux @F1.2, AGC ON; 0 lux with IR	
Lens	3.6 mm @F1.6, Angle of View: 79 deg	2.8 - 12 mm @F1.4, Angle of View: 96 deg ~ 35 deg
Day & Night	TDN	
Wide Dynamic Range	Digital WDR	
<b>IMAGE</b>		
Video Compression	H.264 / MJPEG	
Compression Standard	Baseline / Main / High Profile	
Resolution	1080p, 720p, D1, CIF	
Number of Streams	3 (main stream ,sub stream ,third stream)	
Resolution	<b>Main stream:</b> 1920 x 1080, 1280 x 720 <b>Sub stream:</b> 704 x 576 , 352 x 288 <b>Third stream:</b> 704 x 576 , 480 x 240 , 352 x 288	
Bit Rate	<b>Main stream:</b> 1024 ~ 6144 Kbps <b>Sub stream:</b> 256 ~ 1536 Kbps <b>Third stream:</b> 128 ~ 1024 Kbps	
Encode Mode	CBR / VBR (Freely adjustable in CBR, 5 levels in VBR)	
Image Settings	ROI, Saturation, Brightness, Contrast, Wide Dynamic, Sharpen, Noise reduction	
ROI	3 ROI	
<b>INTERFACES</b>		
Network	RJ45	
<b>FUNCTIONS</b>		
Remote Monitoring	IE / Firefox Browsing, CMS control	
Online Connection	Simultaneous monitoring for upto 3 users; support multi-stream real time transmission	
Network Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, DDNS, SMTP, FTP, HTTPS	
Interface Protocol	ONVIF S, ONVIF G	
Motion Alarm	Supported	
IR Distance	10 - 20 m	20 - 30m
IP Rating	IP66	
<b>OTHERS</b>		
Power Supply	DC 12V	
Power Consumption	< 2 W	< 2.5 W
IR Consumption ON	< 4 W	< 5 W
Operating Temperature	-20 deg C to 55 deg C, 90% humidity	
Dimensions (mm)	87 x 108	109 x 130
Weight	369g	695g

## PERFORMANCE LITE IP CAMERAS 2MP IP IR BULLET CAMERA

HIB2PI / HIB2PIV

Honeywell's new Performance Lite IP camera series is aimed to provide high quality surveillance as an affordable offering for the small and medium businesses including small retail shops, gyms, schools, residential homes, etc.

The new series includes 2MP IR cameras in both eyeball and bullet configurations with fixed and variable lens options to cater to all kinds of customer applications. The cameras come with IR LEDs so as to provide effective and efficient surveillance even during the night time. The cameras are IP66 rated that makes them resilient for outdoor applications as well



HIB2PI / HIB2PIV



## KEY FEATURES

- 2MP full real time recording
- Max resolution : 1920 x 1080
- True day night function
- Upto 30m IR distance
- 3D DNR, DWDR
- IP 66 certified
- Support triple streams
- Onvif Profile S/G compliant

# PERFORMANCE LITE IP CAMERAS

HIB2PI / HIB2PIV

## SPECIFICATIONS

CAMERA	HIB2PI	HIB2PIV
Image Sensor	1/2.8 CMOS	
Number of Pixels (H x V)	1920 x 1080	
Electronic Shutter	1/25s ~ 1/ 100000s	
Iris	Fixed Iris	
Min Illumination	0.1 lux @F1.2, AGC ON; 0 lux with IR	
Lens	3.6 mm @F1.6, Angle of View: 79 deg	2.8 - 12 mm @F1.4, Angle of View: 96 deg ~ 35 deg
Day & Night	TDN	
Wide Dynamic Range	Digital WDR	
<b>IMAGE</b>		
Video Compression	H.264 / MJPEG	
Compression Standard	Baseline / Main / High Profile	
Resolution	1080p, 720p, D1, CIF	
Number of Streams	3 (main stream ,sub stream ,third stream)	
Resolution	<b>Main stream:</b> 1920 x 1080, 1280 x 720 <b>Sub stream:</b> 704 x 576 , 352 x 288 <b>Third stream:</b> 704 x 576 , 480 x 240 , 352 x 288	
Bit Rate	<b>Main stream:</b> 1024 ~ 6144 Kbps <b>Sub stream:</b> 256 ~ 1536 Kbps <b>Third stream:</b> 128 ~ 1024 Kbps	
Encode Mode	CBR / VBR (Freely adjustable in CBR, 5 levels in VBR)	
Image Settings	ROI, Saturation, Brightness, Contrast, Wide Dynamic, Sharpen, Noise reduction	
ROI	3 ROI	
<b>INTERFACES</b>		
Network	RJ45	
<b>FUNCTIONS</b>		
Remote Monitoring	IE / Firefox Browsing, CMS control	
Online Connection	Simultaneous monitoring for upto 3 users; support multi-stream real time transmission	
Network Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, DDNS, SMTP, FTP, HTTPS	
Interface Protocol	ONVIF S, ONVIF G	
Motion Alarm	Supported	
IR Distance	20 – 30 m	
IP Rating	IP66	
<b>OTHERS</b>		
Power Supply	DC 12V	
Power Consumption	<2 W	
IR Consumption ON	<5 W	
Operating Temperature	-20 deg C to 55 deg C, 90% humidity	
Dimensions (mm)	87 x 219	
Weight	605 g	

## 5 Megapixel Fisheye IP Cameras

HFD5PR1

Honeywell is taking quality and reliability to the next level with the new Performance Series fisheye IP cameras. The Honeywell Day/Night superior HD fisheye IP cameras offer incomparable picture clarity, an incredibly wide coverage area, hassle-free flexible system integration, and secure data transmission—and they install easily too!

### Superior Image Quality

- Full HD 5 megapixel 12 fps image with a 1/3" 5 megapixel sensor
- Digital WDR (DWDR) ensures glare-free images
- Electronic Day/Night provides vivid color images by day and clear black-and-white images at night
- Excellent low-light performance with 3D noise reduction, saving storage and bandwidth together with H.264 Profile codec

### Flexible Surveillance Solution

- 1.42 mm, F2.6, fixed fisheye lens
- H.264 and MJPEG codec, dual stream support
- -22°F to 104°F (-30°C to 40°C) working temperature
- Security features include individual signed certificates and data encryption
- Cameras can be retrofitted on many existing NVR installations without requiring additional storage

### Easy to Install and Use

- Built-in PoE (Power over Ethernet) eliminates separate power supply and associated wiring; 12 VDC input where PoE power is unavailable
- Remote configuration through web client or from the NVR
- Included accessories: security screw driver, mounting screws, drywall anchors, mounting template, and water-proof joint for network cable



### Onboard Video Storage

- Supports up to 64 GB microSDHC card for local video storage when the network is interrupted

### Market Opportunities

These fully featured attractive cameras are perfect for indoor installations that require excellent picture quality at minimal bandwidth while offering multiple display and installation mode options. Boasting a sleek modern design and offering the widest angle of view possible, the cameras are suited for a wide range of applications.

## FEATURES AND BENEFITS

- Superior HD 5 MP resolution at 12 fps
- Widest horizontal angle of view at 185°
- Excellent low light performance with down to 0.0001 lux BW
- Image dewarping and embedded PTZ controls for full monitoring of the entire 360° fisheye view
- Choice of 12 VDC or PoE (802.3af) power inputs
- Up to dual stream support
- 1/3" 5 MP progressive scan imager
- Digital WDR
- On board camera storage: up to 64 GB microSD card
- 1.42 mm, F2.6, fixed fisheye lens

# 5 Megapixel Fisheye IP Cameras Technical Specifications

OPERATIONAL		
VIDEO STANDARD	NTSC/PAL	
SCANNING SYSTEM	Progressive scan	
IMAGE SENSOR	1/3" 5 MP Progressive CMOS	
NUMBER OF PIXELS (H x V)	2592 x 1944	
MINIMUM ILLUMINATION	0.01 lux (color)/0.001 lux (B/W) @ F2.6	
S/N RATIO	> 50 dB	
ELECTRONIC SHUTTER SPEED	Auto, Manual, 1/3(4) – 1/100,000 sec	
DAY/NIGHT	Auto (Electronic)/Color/BW	
BACKLIGHT COMPENSATION	BLC/HLC/DWDR	
WIDE DYNAMIC RANGE	Digital WDR (DWDR)	
WHITE BALANCE	Auto/Manual	
GAIN CONTROL	Auto/Manual	
NOISE REDUCTION	3DNR	
PRIVACY MASKING	Up to 4 areas	
LENS	1.42 mm, Fixed fisheye lens, F2.6	
ANGLE OF VIEW	Horizontal: 185°	
AUDIO/TWO-WAY	1/1 Channel In/Out, Built-in Mic	
ALARM INPUT/OUTPUT	1/1 Channel In/Out	
ETHERNET	RJ-45 (10/100Base-T)	
IP SPECIFICATIONS		
VIDEO COMPRESSION	H.264/MJPEG Bit rate control (CBR and VBR)	
RESOLUTION	4:3	5M (2560x1920) / 3M (2048x1520) / UXGA (1600x1200) / 1.3M (1280x960)
	OTHER	720p (1280x720) / D1 (704x576/704x480) / CIF (352x288/352x240)
FRAME RATE	MAIN STREAM	5M (3072x2048) at 1-12 fps UXGA (1600x1200) at up to 25/30 fps
	SECOND STREAM	D1/CIF up to 25/30 fps
AUDIO COMPRESSION	G.711a/G.711u	

IP SPECIFICATIONS (CON'T)	
SUPPORTED PROTOCOLS*	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, SSL, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, Bonjour, DNS, DDNS, IEEE 802.1x, QoS, NTP, IP Filter
MAXIMUM USERS ACCESS	20 users
SUPPORTED WEB BROWSERS	Internet Explorer® (11.0+)
SUPPORTED OS	Windows® 7 32-bit/64-bit
MICRO SD	Up to 64 GB microSDHC card
MICRO SD FUNCTION	Event trigger recording Continuous and scheduled recording Automatic recording when network fails
ELECTRICAL	
POWER SUPPLY	PoE (802.3af) Class 0/12 VDC
POWER CONSUMPTION	6.0 W max.
MECHANICAL	
DIMENSIONS	Ø4.3" x 2.1" (Ø110.0 mm x 54.0 mm)
PRODUCT WEIGHT	0.55 lb. (0.25 kg)
CONSTRUCTION COLOR	White (RAL CODE 9003)
ENVIRONMENTAL	
OPERATING TEMPERATURE	-22°F to 104°F (-30°C to 40°C)
RELATIVE HUMIDITY	Less than 95%, non-condensing
REGULATORY	
EMISSIONS	FCC Part 15B, EN55032
IMMUNITY	EN50130-4; EN55024
SAFETY	EU: EN60950-1 North America UL listed to UL/CSA 60950-1
ROHS	EN50581: 2012

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



# HBW4PER2

## WDR 4 MP IR Bullet Camera



OPERATIONAL	
VIDEO STANDARD	NTSC/PAL
SCANNING SYSTEM	Progressive scan
IMAGE SENSOR	1/3" 4 MP CMOS
NUMBER OF PIXELS (H × V)	2688 × 1520
MINIMUM ILLUMINATION	0.03 lux colour @ F1.4(Colour, 1/3s, 30 IRE) 0 lux B/W with IR LEDs on @ F1.4
S/N RATIO	> 45 dB
ELECTRONIC SHUTTER SPEED	1/3(4) – 1/100,000 s
IR DISTANCE	Up to 50 m (164 ft), depending on scene reflectance
SMART IR	Auto/Manual
DAY/NIGHT	Auto (ICR)/Colour/BW
BACKLIGHT COMPENSATION	BLC/HLC/WDR (120 dB)
WHITE BALANCE	Auto/Natural/Street Lamp/Outdoor/Manual
GAIN CONTROL	Auto/Manual
WIDE DYNAMIC RANGE	True WDR (120 dB)
NOISE REDUCTION	3D DNR
PRIVACY MASKING	Up to 4 configurable zones
MOTION DETECTION	Up to 4 configurable zones
REGION OF INTEREST	Up to 4 configurable zones
DIGITAL ZOOM	16x
LENS	2.7 – 13.5 mm, MFZ, F1.4
ANGLE OF VIEW	104° – 28° (H), 55° – 16° (V)
VIDEO	
VIDEO COMPRESSION	H.265+/H.265/H.264+/H.264
RESOLUTION	4 MP (2688×1520), QHD (2560×1440), 3 MP (2304×1296), 1080p (1920×1080), SXGA (1280×1024), 1.3 MP (1280×960), 720p (1280×720), D1 (704×576/704×480), VGA (640×480), CIF (352×288/352×240)
FRAME RATE	4 MP at 1 – 20fps, 3 MP at 1 – 25/30fps D1/CIF at 1 – 25/30fps
BIT RATE CONTROL	CBR/VBR
BIT RATE	H.265: 12K – 8448 Kbps H.264: 32K – 10240 Kbps
NETWORK	
ETHERNET	RJ-45 (10/100BASE-T)
SUPPORTED WEB BROWSERS	Internet Explorer (11.0+)
SUPPORTED OS	Windows 7 32-bit

NETWORK (CONT'D)	
PROTOCOLS	IPv4/v6, TCP/IP, UDP, RTP, RTSP, RTCP, HTTP, HTTPS, SSL, FTP, SMTP, DHCP, PPPoE, UPnP, SNMP v2/v3, Bonjour, DNS, DDNS, IEEE 802.1X, QoS, NTP
INTEROPERABILITY	ONVIF Profile S, Profile G
MAXIMUM USER ACCESS	20 users
SECURITY	User account and password protection, HTTPS, IP filter, IEEE 802.1X, digest authentication, user access log, TLS1.2, AES-256, SSH/Telnet closed, FTP disabled
EVENT	No SD card, SD card error, SD card capacity warning, network disconnection, IP address conflict, illegal access, video tampering, motion detection
EVENT NOTIFICATION	Record (SD card, NAS, and FTP), relay output, email, snapshot
MICRO SD	Up to 128 GB microSDHC card, Class 10 (not included)
ELECTRICAL	
POWER SUPPLY	PoE (802.3af) Class 0, 12 VDC
POWER CONSUMPTION	11.74 W max. (IR LEDs on)
MECHANICAL	
DIMENSIONS	214.8 mm × 90.4 mm (8.46" × 3.56")
PRODUCT WEIGHT	0.685 kg (1.51 lb)
PACKAGE WEIGHT	0.86 kg (1.90 lb)
CONSTRUCTION	Die-cast aluminum housing with powder coat
CONSTRUCTION COLOUR	RAL 9003 (White)
ENVIRONMENTAL	
OPERATING TEMPERATURE	-30°C to 60°C (-22°F to 140°F)
STORAGE TEMPERATURE	-30°C to 60°C (-22°F to 140°F)
RELATIVE HUMIDITY	Less than 95%, non-condensing
INGRESS PROTECTION	IP66
REGULATORY	
EMISSIONS	FCC Part 15B, EN 55032
IMMUNITY	EN 50130-4
SAFETY	EU: EN 60950-1 North America UL listed to UL/CSA 60950-1
ROHS	EN 50581

## TDN WDR IR Bullet Camera

HBW2PR1/HBW4PR1

Honeywell's new Performance Series IP bullet cameras are taking quality and reliability to the next level, offering outstanding picture clarity and hassle-free flexible system integration.

### Superior Image Quality

- Full HD 1080p 25/30 fps image with a 1/2.7" 2 megapixel sensor or full HD 4 MP 20 fps image with a 1/3" 4 megapixel sensor
- Wide Dynamic Range, up to 120 dB, ensures glare-free images
- True Day/Night provides vivid color images by day and clear black-and-white images at night with ICR
- Excellent low-light performance with 3D noise reduction, saving storage and bandwidth

### Flexible Surveillance Solution

- 3.6 mm fixed lens at F2.1 or F2.2
- H.264 and MJPEG codec, triple stream support
- IR LEDs provide up to 130 ft (40 m) of illumination in dimly lit or nighttime scenes (depending on scene reflectance)
- Smart IR technology provides even distribution of IR
- Weatherproof (IP66) camera housing
- -30°C to 60°C (-22°F to 140°F) working temperature
- Plug-and-play compatible with Honeywell 4/8/16-channel Performance Series Embedded NVRs

### Easy to Install and Use

- Built-in PoE (Power over Ethernet) eliminates need for separate power supply and associated wiring; 12 VDC inputs where PoE power is unavailable
- Remote configuration through web client or from the NVR
- Compatible with HQA-BB1 junction box, HQA-PM pole mount, and HB34S2-CM corner mount



### Market Opportunities

These flexible, fully featured cameras are ideal for a wide range of surveillance applications, providing excellent picture quality at minimal bandwidth while offering reliable protection against dust, dirt, and water.

## FEATURES AND BENEFITS

- 1/2.7" 2 MP or 1/3" 4 MP progressive scan imager
- 3.6 mm fixed lens
- True day/night (IR-cut filter)
- Wide dynamic range up to 120 dB
- Low-light performance down to 0.01 lux (color) or 0 lux with IR LEDs on
- Up to 130 ft (40 m) IR illumination, depending on scene reflectance
- H.264 Main Profile compression
- Triple stream support
- Supports up to 20 connections
- Corridor mode
- PoE, 12 VDC support
- Plug-and-play compatible with Honeywell Performance Series Embedded NVRs
- Weatherproof housing with IP66 ingress protection rating

# TDN WDR IR Bullet Camera

## SPECIFICATIONS

OPERATIONAL		
VIDEO STANDARD	NTSC/PAL	
SCANNING SYSTEM	Progressive scan	
IMAGE SENSOR	<b>HBW2PR1:</b> 1/2.7" 2 MP CMOS <b>HBW4PR1:</b> 1/3" 4 MP CMOS	
NUMBER OF PIXELS (H×V)	<b>HBW2PR1:</b> 1920×1080 <b>HBW4PR1:</b> 2688×1520	
MINIMUM ILLUMINATION	0.01 lux, F2.0 (color) 0 lux (with IR LEDs on)	
S/N RATIO	50 dB or more	
ELECTRONIC SHUTTER SPEED	Auto, Manual, 1/3–1/100 000 s	
IR DISTANCE	Up to 130 ft (40 m), depending on scene reflectance	
DAY/NIGHT	Auto(ICR)/Color/BW	
BACKLIGHT COMPENSATION	BLC/HLC/WDR (120 dB)	
WHITE BALANCE	Auto/Sunny/Night/Outdoor/Customized	
GAIN CONTROL	Auto/Manual	
NOISE REDUCTION	3DNR	
PRIVACY MASKING	Up to 4 areas	
LENS	<b>HBW2PR1:</b> 3.6 mm, F2.2 <b>HBW4PR1:</b> 3.6 mm, F2.1	
HORIZONTAL ANGLE OF VIEW	<b>HBW2PR1:</b> 93° <b>HBW4PR1:</b> 84°	
CORRIDOR MODE	Yes	
VIDEO		
VIDEO COMPRESSION	H.264/H.264H/H.264B/MJPEG	
RESOLUTION	<b>HBW2PR1:</b> 1080p (1920×1080)/ 720p (1280×720)/D1 (704×576/ 704×480)/CIF (352×288/352×240) <b>HBW4PR1:</b> 4 MP (2688×1520/ 2560×1440)/3 MP (2304×1296)/ 1080p (1920×1080)/720p (1280×720)/D1 (704×576/ 704×480)/ CIF (352×288/352×240)	
FRAME RATE	MAIN STREAM	<b>HBW2PR1:</b> 1080p/720p (1–25/30 fps) <b>HBW4PR1:</b> 4 MP (1–20 fps)/3MP (1–25/30 fps)
	SUB STREAM	D1/CIF (1–25/30 fps)
	TRIPLE STREAM	<b>HBW2PR1:</b> 720p (1–13/4 fps) <b>HBW4PR1:</b> 720p (1–20 fps)
BIT RATE (H.264)	32 Kbps – 10 Mbps	

NETWORK	
ETHERNET	RJ-45 (10/100Base-T)
PROTOCOLS*	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter, QoS, Bonjour, 802.1X
COMPATIBILITY	ONVIF Profile S*
MAX. USER ACCESS	20 users
MOBILE DEVICES	iPhone, iPad, Android
ELECTRICAL	
POWER SUPPLY	PoE IEEE 802.3af Class 0, 12 VDC
POWER CONSUMPTION	<b>HBW2PR1:</b> 6.5 W max. <b>HBW4PR1:</b> 6.0 W max.
MECHANICAL	
DIMENSIONS	181.0 × 74.0 × 70.0 mm (7.13 × 2.91 × 2.76 in.)
PRODUCT WEIGHT	0.88 lb (0.4 kg)
PACKAGE WEIGHT	1.17 lb (0.53 kg)
CONSTRUCTION	Die-cast aluminum housing with powder coat
CONSTRUCTION COLOR	RAL 9003 (White)
ENVIRONMENTAL	
TEMPERATURE	–30°C to 60°C (–22°F to 140°F)
RELATIVE HUMIDITY	0–95%, non-condensing
INGRESS PROTECTION	IP66
REGULATORY	
EMISSIONS	FCC Part 15, CE (EN 55032)
IMMUNITY	CE (EN 50130-4)
SAFETY	North America UL Listed to UL/CSA 60950-1, CE (EN 60950-1) North America UL Listed to UL/CSA 60950-22, CE (EN 60950-22)

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

# HED2PER3

TDN 1080p IR Ball Camera



HD



OPERATIONAL	
VIDEO STANDARD	NTSC/PAL
SCANNING SYSTEM	Progressive scan
IMAGE SENSOR	1/3" 2 MP CMOS
NUMBER OF PIXELS (H × V)	1920 × 1080
MINIMUM ILLUMINATION	0.08 lux colour @ F2.0 (Colour, 1/3s, 30 IRE), 0 lux B/W with IR LEDs on @ F2.0
S/N RATIO	> 45 dB
ELECTRONIC SHUTTER SPEED	1/3(4) – 1/100,000 s
IR DISTANCE	Up to 25 m (82 ft), depending on scene reflectance
SMART IR	Auto/Manual
DAY/NIGHT	Auto (ICR)/Colour/BW
BACKLIGHT COMPENSATION	BLC/HLC/DWDR
WHITE BALANCE	Auto/Natural/Street Lamp/Outdoor/Manual
GAIN CONTROL	Auto/Manual
NOISE REDUCTION	3D DNR
PRIVACY MASKING	Up to 4 configurable zones
MOTION DETECTION	Up to 4 configurable zones
REGION OF INTEREST	Up to 4 configurable zones
DIGITAL ZOOM	16x
LENS	2.8 mm, fixed, F2.0
ANGLE OF VIEW	110°/83° (H), 56°/44° (V)
VIDEO	
VIDEO COMPRESSION	H.265+/H.265/H.264+/H.264
RESOLUTION	1080p (1920×1080), SXGA (1280×1024), 1.3 MP (1280×960), 720p (1280×720), D1 (704×576/704×480), VGA (640×480), CIF (352×288/352×240)
FRAME RATE	2 MP at 1 – 25/30fps D1/CIF at 1 – 25/30fps
BIT RATE CONTROL	CBR/VBR
BIT RATE	H.265: 12K – 6400 Kbps H.264: 32K – 10240 Kbps
NETWORK	
ETHERNET	RJ-45 (10/100BASE-T)
SUPPORTED WEB BROWSERS	Internet Explorer (11.0+)
SUPPORTED OS	Windows 7 32-bit

NETWORK (CONT'D)	
PROTOCOLS	IPv4/v6, TCP/IP, UDP, RTP, RTSP, RTCP, HTTP, HTTPS, SSL, FTP, SMTP, DHCP, PPPoE, UPnP, SNMP v2/v3, Bonjour, DNS, DDNS, IEEE 802.1X, QoS, NTP
INTEROPERABILITY	ONVIF Profile S
MAXIMUM USER ACCESS	20 users
SECURITY	User account and password protection, HTTPS, IP filter, IEEE 802.1X, digest authentication, user access log, TLS1.2, AES-256, SSH/Telnet closed, FTP disabled
EVENT	Network disconnection, IP address conflict, illegal access, video tampering, motion detection
EVENT NOTIFICATION	Record (NAS and FTP), relay output, email, snapshot
ELECTRICAL	
POWER SUPPLY	PoE (802.3af) Class 0, 12 VDC
POWER CONSUMPTION	4.12 W max. (IR LEDs on)
MECHANICAL	
DIMENSIONS	93.4 mm × 79.7 mm (3.68" × 3.14")
PRODUCT WEIGHT	0.23 kg (0.51 lb)
PACKAGE WEIGHT	0.38 kg (0.85 lb)
CONSTRUCTION	Die-cast aluminum housing with powder coat
CONSTRUCTION COLOUR	RAL 9003 (White)
ENVIRONMENTAL	
OPERATING TEMPERATURE	-30°C to 55°C (-22°F to 131°F)
STORAGE TEMPERATURE	-30°C to 55°C (-22°F to 131°F)
RELATIVE HUMIDITY	Less than 95%, non-condensing
INGRESS PROTECTION	IP66
REGULATORY	
EMISSIONS	FCC Part 15B, EN 55032
IMMUNITY	EN 50130-4
SAFETY	EU: EN 60950-1 North America UL listed to UL/CSA 60950-1
ROHS	EN 50581

## HJC4000 UltraKey Touch

### DVR AND PTZ DOME CAMERA CONTROLLER

The HJC4000 controller represents the latest advancements in PTZ (pan/tilt/zoom) dome and DVR (digital video recorder) control for CCTV security professionals. Designed for operator ease-of-use and system flexibility, the HJC4000 offers superior control for Honeywell's video products including ACUIX™ Series PTZ dome cameras and the HRXD, HRSD, and Fusion Series of DVRs.

Each HJC4000 can control up to 128 dome cameras or 128 channels from DVRs. The HJC4000's flexibility is enhanced with the option of slaving keyboard controllers, allowing control from four separate locations.

With an ergonomically designed keypad and 2-line LCD display, the HJC4000 is easy to learn and simple to use. Programming can be done directly through the keypad and LCD display or through a simple web browser. Standard PTZ camera functions such as set and recall of presets, pan, tilt and zoom, tours and PTZ menu are easily accessible and managed by an operator. Additionally, higher level dome functions such as home preset, remote reset, privacy zones and mimic tours are also available to operators when needed.

While in DVR mode, users can easily access standard recording and playback functions, display modes, navigate through menu screens, and control alarms. The HJC4000 makes it possible for operators to control their DVRs without the need for a PC and client software and offers joystick control of PTZs connected to the DVRs.

### Market Opportunities

The HJC4000 is an excellent choice for small- to mid-size installations where PTZ domes and DVRs are used together. The HJC4000 offers the ability to manage a system from a single controller that is simple and easy to use. Users can greatly benefit from shorter learning curves and minimal key sequences. The end result is greater control of their video security systems.

### Features

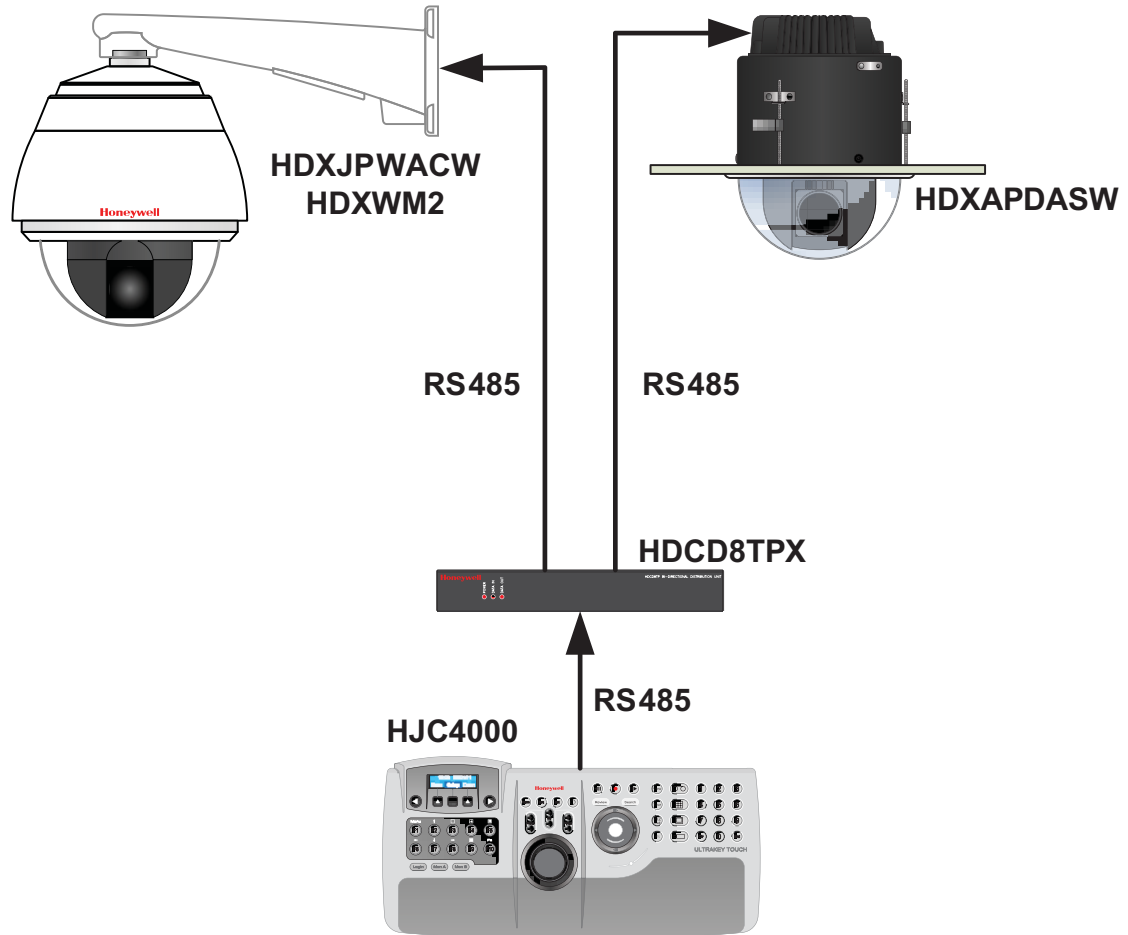
- Complete control of up to 128 ACUIX™ and HDT PTZ domes
- Support for PTZ protocols: IntelliBus™, Diamond, VCL, Pelco D, Pelco P
- Complete control of up to 128 channels of same protocol DVRs (HRXD, HRSD, Fusion)
- Option to cascade multiple controllers
- Web browser for simple configuration and firmware updates
- Quick and simple installation with RJ type connectors
- Supports RS232 and RS485 control ports



# HJC4000 UltraKey Touch

## SYSTEM DIAGRAM

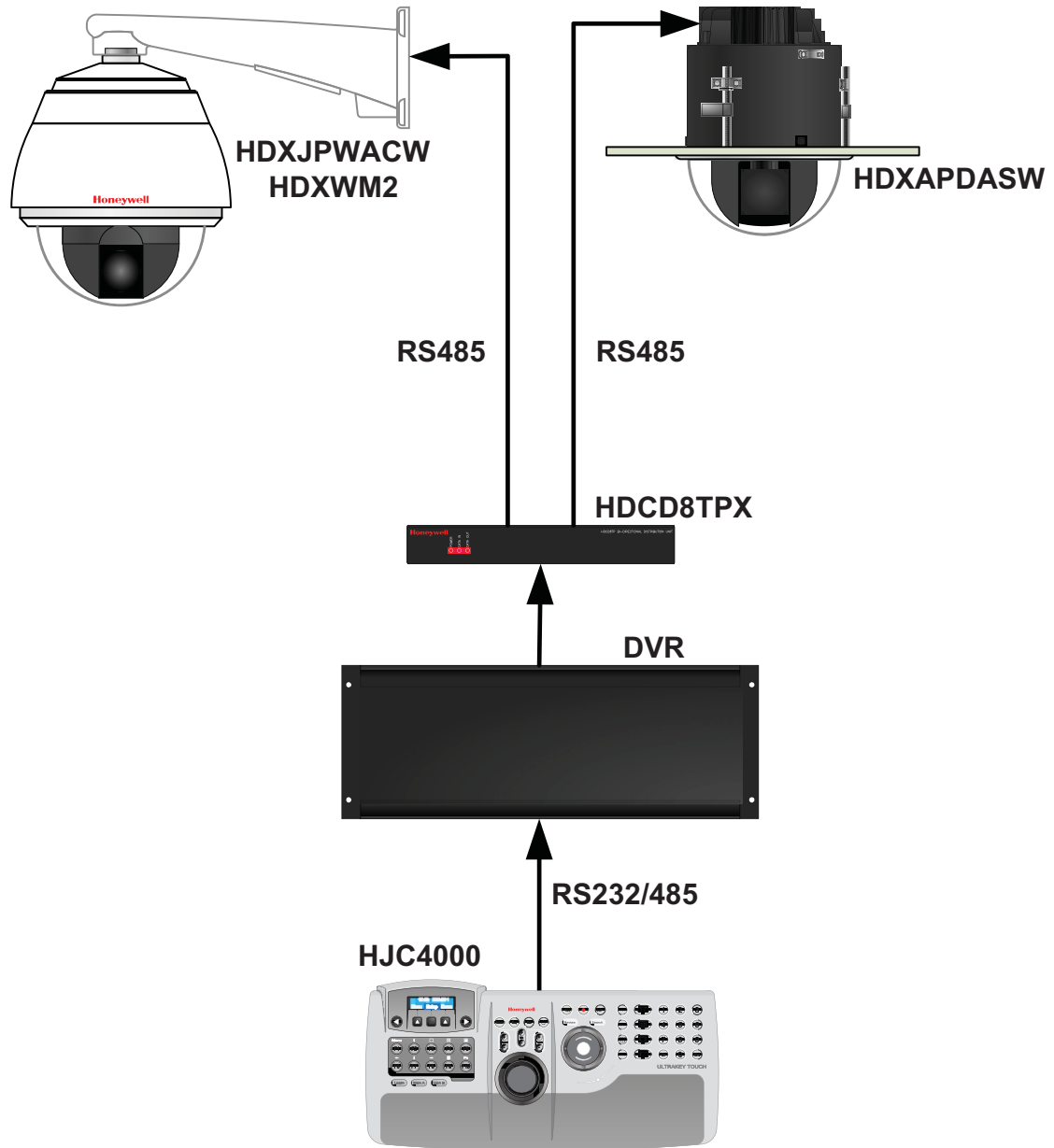
### Standalone PTZ Control



# HJC4000 UltraKey Touch

## SYSTEM DIAGRAM

### Standalone DVR Control

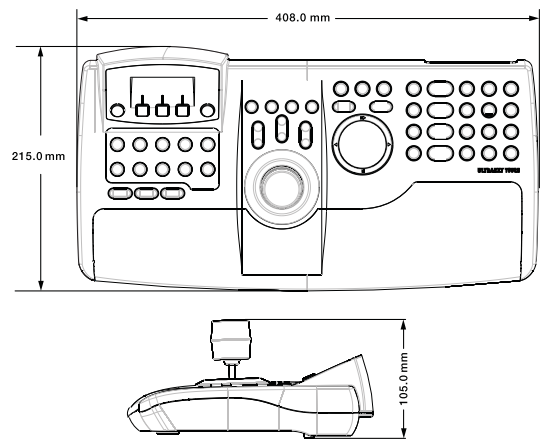


# HJC4000 UltraKey Touch

## ORDERING

Operational	
Baud Rates	1200, 1800, 2400, 4800, 9600, 19200, 38400, 57600
Operating Distances	RS232: 15.2 m RS485: 1219 m LAN: 100 m
Joystick	3-axis proportional control
Keys	Laser cut
Touch Wheel	DVR/NVR control
Standard Keys	0-9, Seq, Set, Backwards, Record, Forwards, View, Split Screen, Ent, Mon, Alt, Mon B, Login
Camera Function Keys	View, Tour, PTZ Call, Alt, Set, Iris, (2) Focus, MonA, MonB
DVR/NVR Keys	Rec/Stop, Play Fwd, Play Rev, Review, Search, Touch Pad and Ring for FF, REW, Step FWD, REV, or speed control (specific function dependant on DVR being controlled)
LCD	STN, Positive image, 122 x 32 Dots, Blue White backlight
Electrical	
Input Voltage	100 - 240 VAC (Wall transformer)
Operating Voltage	10.8 to 13.2 VDC
Power Consumption	1A, 12 Watts
Mechanical	
Dimensions (W x H x D)	408.0 mm x 215.0 mm x 105.0 mm
Weight	3.2 kg
Construction	ABS+PC (Cool Grey)
Connections	
LAN	10Base-T, 100Base-TX RJ45 used for web browser configuration and firmware updates
COM 1 and 2	1 x RJ45 for COM1 RS485 and COM2 RS232
Power	Locking DC connector

Environmental	
Temperature	Operating: -10° to 55°C Storage: -40° to 75°C
Relative Humidity	0-95% non-condensing
Regulatory	
Emissions	CE: EN55022 FCC Part 15 Class B
Immunity	EN50130-4/A2:2003
Safety	UL 60950-1
Included Accessories	
Power Adapter	100-240VAC, 12VDC, 50-60Hz, 1Amp with Europlug, North American, British, Chinese and Australian plugs
LAN Cable	1 x 2 m network patch cable
RJ45 Box	RJ45 to screw terminal box for RS232 and RS485 connections
RJ45 Adapter	RJ45 to DB9 Female for RS232 connection
System Compatibility	
PTZ Domes	ACUIX™ Series
PTZ Protocol	IntelliBus™, VCL, Diamond, Pelco P, Pelco D
DVRs	HRXD, HRSD, and Fusion DVRs (Some DVRs may require firmware update)



Ordering	
HJC4000	PTZ and DVR controller, cables and 10.8 to 13.2 VDC, 1A power supply

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

For additional information, please visit [www.honeywell.com/security/uk](http://www.honeywell.com/security/uk)

### Honeywell Security Group

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April 2011  
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# Honeywell



## 8-/16-/32-Channel 4K ENVRs

HEN08104/HEN08144/HEN16104/HEN16144  
HEN16184/HEN32104/HEN321124

Introducing Honeywell's Performance 4K Embedded NVRs, our newest affordable, fully featured NVRs offering Ultra HD 4K video resolution. Choose an 8-, 16-, or 32-channel NVR, with multiple hard drive options plus the ability to expand to up to 16 TB of internal storage, for an ideal and flexible solution to fit your surveillance situation.

### Fully-featured NVRs

- High decoding capability for Ultra 4K HD viewing and recording
- View 4/8/16 channels simultaneously with synchronized real-time playback on your monitor (depending on your model)
- Up to 12 MP (4K) resolution live view, preview and playback
- Up to 16 channels at 1080p H.265/H.264 decoding
- De-warp fisheye camera video in local and web user interface for 360 degree situational awareness

### Dynamic, Accessible Monitoring

- Monitor from anywhere using the mobile apps for both Apple® and Android™ devices (smartphones, tablet computers, and laptops)
- Protect the NVR's video and network setup with password-protected access
- Conceal up to 4 areas of a scene from viewing and recording

### Convenient, Flexible Storage Options

- Internal storage supports 2 HDDs expandable up to 16 TB (8 TB each)
- Store video clips and snapshots to external storage, such as the client's PC, through the Internet connection
- Store video clips and snapshots to external network storage servers, such as an FTP site
- Store video clips and snapshots to a USB memory device



HD

### Easy to Use

- The Quick wizard and PoE support (for up to 8/16 channels) make setup fast and easy
- Quick physical installation with the help of a simple NVR design and easy-to-understand quick installation guides
- Simple remote configuration and firmware updating through the Honeywell Viewer web client and the Honeywell Config tool

### Market Opportunities

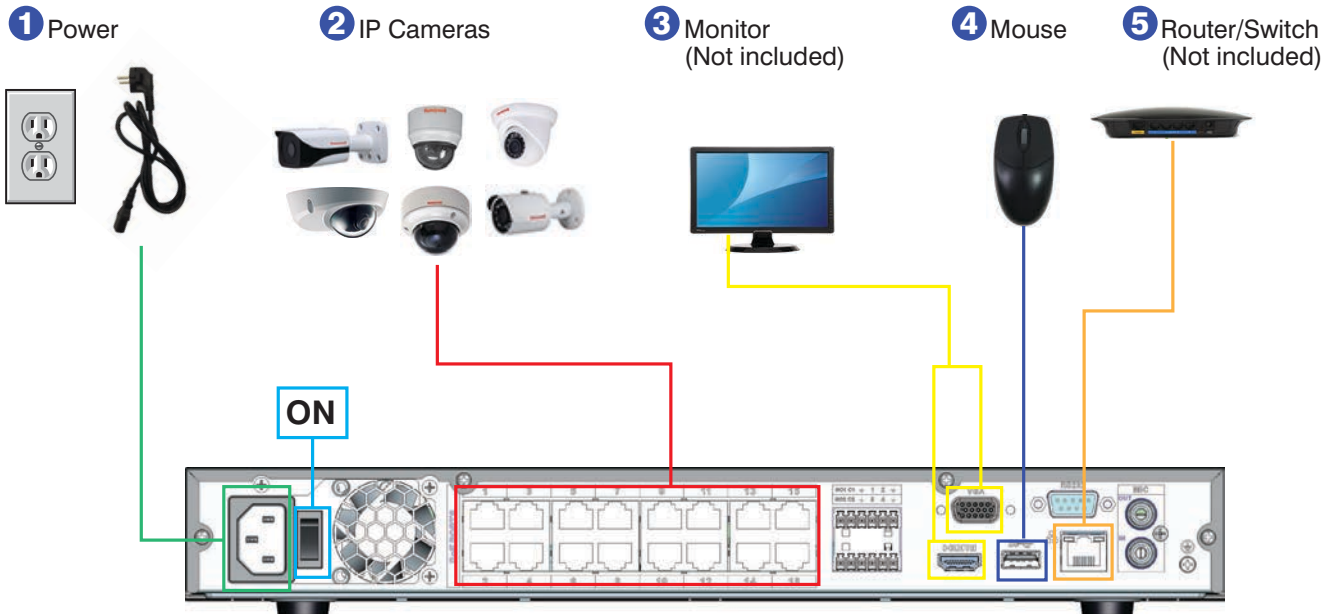
The flexible storage options and high recording and networking performance of the Performance 4K Embedded NVRs make these NVRs perfect for a wide range of security applications.

## FEATURES AND BENEFITS

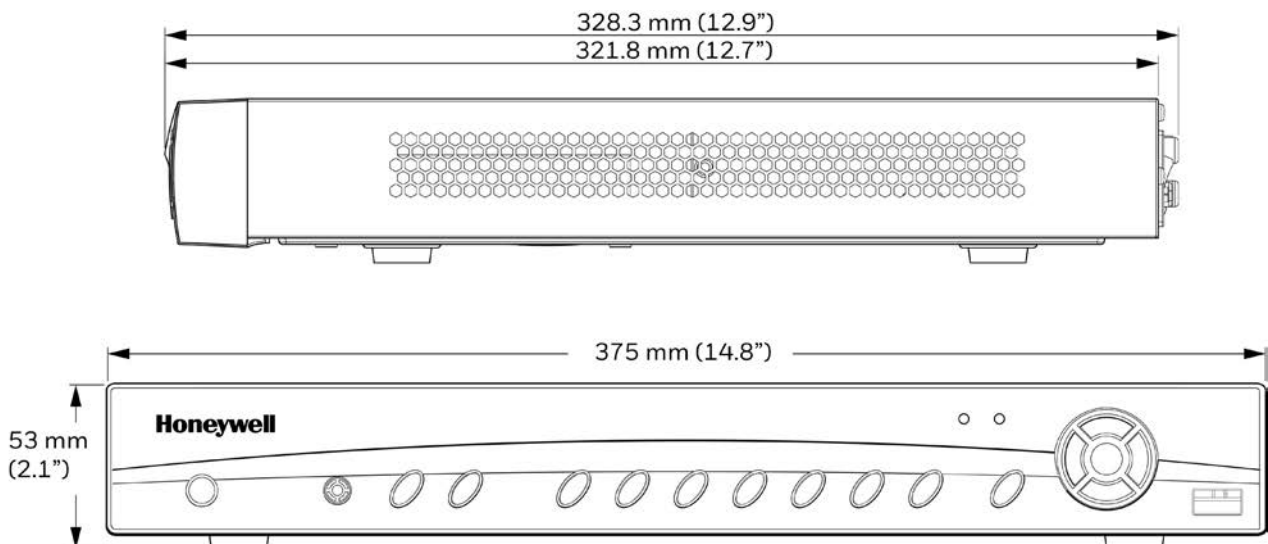
- H.265/H.264/MJPEG/MPEG4 codec decoding
- Supports up to 4 alarm input channels and 2 alarm relay output channels
- Supports recording a video clip of events for distribution
- Configurable to automatically detect and respond to motion in the scene, alarm inputs, and network failure or tampering
- Supports visual or auditory notifications (a flashing light, bell, or siren)
- HDMI/VGA simultaneous video output
- Supports sending notifications through email, FTP, and/or HTTP
- Supports uploading still images at the time of the event through email and/or FTP
- Maximum incoming bandwidth of 320 Mbps
- UL listed
- Supports fisheye video de-warping in local and web user interface

# 8-/16-/32-Channel 4K ENVRs Technical Specifications

## SYSTEM DIAGRAM



## DIMENSIONS



# 8-/16-/32-Channel 4K ENVRs Technical Specifications

SYSTEM	
MAIN PROCESSOR	Quad-core embedded processor
OPERATING SYSTEM	Embedded LINUX
VIDEO	
INPUTS	<b>HEN081*4:</b> 8 Channels IP <b>HEN161*4:</b> 16 Channels IP <b>HEN321*4:</b> 32 Channels IP
AUDIO	
AUDIO INPUT/OUTPUT	1 Channel Input/1 Channel Output, RCA
TWO-WAY COMMUNICATION	Supported
DISPLAY	
INTERFACE	1 HDMI (up to 3840 × 2160); 1 VGA
RESOLUTION	3840 × 2160; 1920 × 1080; 1280 × 1024; 1280 × 720; 1024 × 768
DISPLAY SPLIT	<b>HEN081*4:</b> 1/4/8/9 <b>HEN161*4:</b> 1/4/8/9/16 <b>HEN321*4:</b> 1/4/8/9/16/25/36
OSD	Camera title; Time; Video loss; Camera lock; Motion detection; Recording
FISHEYE VIDEO DE-WARPING	Supported in local and web user interface
RECORDING	
COMPRESSION	H.265/H.264/MJPEG/MPEG4
RESOLUTION	<b>12 MP</b> (4000 × 3000); <b>8 MP</b> (3840 × 2160); <b>6 MP</b> (3072 × 2048); <b>5 MP</b> (2560 × 1920); <b>4 MP</b> (2560 × 1440); <b>3 MP</b> (2048 × 1520); <b>1080p</b> (1920 × 1080); <b>720p</b> (1280 × 720); <b>D1</b> (704 × 576 / 704 × 480); <b>CIF</b> (352 × 288 / 352 × 240)
FRAME RATE	1–15 fps (12 MP and 8 MP); 1–25/30 fps (rest of the resolutions)
RECORD BIT RATE	320 Mbps
BIT RATE <sup>1</sup>	16 kbps ~ 20 Mbps, per channel
RECORDING MODE	Schedule (Regular/Continuous, Motion Detection, Alarm); Manual; Stop
RECORDING INTERVAL	1 to 120 minutes (default 60 min)
PRE-EVENT RECORDING INTERVAL	1 to 30 seconds
POST-EVENT RECORDING INTERVAL	10 to 300 seconds
VIDEO DETECTION AND ALARMS	
TRIGGER EVENTS	Recording; PTZ; Tour; Alarm; Video Push; Email; FTP; Snapshot; Buzzer
VIDEO DETECTION	Motion Detection—MD Zones: 396 (22 × 18); Video Loss; Camera Blank
ALARM INPUT	4 Channels
RELAY OUTPUT	2 Channels
STORAGE	
INTERNAL HDD	2 SATA ports, up to 16 TB

PLAYBACK AND BACKUP	
SYNC PLAYBACK	1/4/8/16 (maximum 4-ch @ 8 MP, 8-ch @ 4 MP, or 16-ch @ 1080p simultaneous playback)
SEARCH MODE	Time/Date; Alarm; Motion Detection (MD); Exact Search (accurate to a second); Smart Search
PLAYBACK FUNCTION	Play; Pause; Stop; Rewind; Fast play; Slow play; Next File; Previous File; Next Camera; Previous Camera; Full Screen; Repeat; Shuffle; Backup selection; Digital Zoom
BACKUP MODE COMPATIBILITY	USB Device; Network; Internal SATA burner
NETWORK	
ETHERNET	1 RJ-45 port (10/100/1000 Mbps)
POE	<b>HEN081*4:</b> 8 ports (802.3af/at) <b>HEN161*4:</b> 16 ports (802.3af/at) <b>HEN321*4:</b> 16 ports (802.3af/at)
SUPPORTED PROTOCOLS <sup>2</sup>	HTTP, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search, P2P
MAXIMUM NUMBER OF USERS	128 users
NETWORK THROUGHPUT	Input 320 Mbps; Output 320 Mbps
SMART PHONE COMPATIBILITY	iPhone; iPad; Android
AUXILIARY INTERFACE	
USB PORTS	2 (1 rear USB3.0; 1 front USB2.0)
RS232	1 port (for PC communications and keyboard)
ELECTRICAL	
POWER SUPPLY	Single, 100~240 VAC, 50/60 Hz
POWER CONSUMPTION	<b>HEN081*4:</b> 15.2 W max (no HDD) <b>HEN161*4:</b> 14.5 W max (no HDD) <b>HEN321*4:</b> 14.5 W max (no HDD) <b>PoE:</b> 25.5 W for a single port (130 W total)
ENVIRONMENTAL	
OPERATING TEMPERATURE	-10°C to 55°C (14°F to 131°F)
RELATIVE HUMIDITY	10% to 90%, non-condensing
STORAGE TEMPERATURE	-20°C to 70°C (-4°F to 158°F), 0% to 90% relative humidity
PHYSICAL	
DIMENSIONS	375 mm × 327 mm × 53 mm (14.8" × 12.9" × 2.1")
WEIGHT (WITHOUT HDD)	2.7 kg (6.0 lb.)
REGULATORY	
EMISSIONS	FCC Part 15B, EN55032: 2012 +AC: 2013, EN61000-3-2: 2014, EN61000-3-3: 2013
IMMUNITY	EN50130-4: 2011+A1: 2014, EN55024: 2010+A1: 2015
SAFETY	EU: EN60950-1 North America UL listed to UL/CSA 60950-1
ROHS	EN50581: 2012

\* The \* = hard drive capacity in TB.

1. Actual bitrate is scene and motion dependent with H.264 stream.
2. Some development might be required in specific user cases to support some of these protocols in the field, as naturally protocols will mature over time.