

# DH-IPC-HDBW5431E-ZE

4MP WDR IR Dome Network Camera





## System Overview

With upgraded H.265 encoding technology, Eco-savvy series brings high efficient video compression capability. It can save bandwidth and storage. Meanwhile, the series features starlight, smart IR technology and intelligent image analysis techniques. This series supports reminder function, meanwhile fully protected from dust and water, certified to IP67 and vandal resistant to IK10 standard.

## Functions

### ePoE technology

The ePoE technology of Dahua, designed internally, adopts advanced 2D-PAM3 coding modulation from physical layer, and realizes full duplex transmission over 800 meters at the speed of 10Mbps, or 300 meters at the speed of 100Mbps via Cat 5 or coaxial cable media. Besides, it supports PoE and PoC power supply technology which has greatly simplified construction and wiring. Dahua ePoE technology offer a new way to accomplish long distance transmission between IP camera and network switch. It allows more flexible surveillance system design, improves reliability and saves construction and wiring cost.

### Wide Dynamic Range

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, true WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

### Intelligent Video System (IVS)

IVS is a built-in video analytic algorithm that delivers intelligent functions to monitor a scene for Tripwire violations, intrusion detection, and abandoned or missing objects. A camera with IVS

- · 1/3" 4Megapixel progressive scan CMOS
- · H.265&H.264 triple-stream encoding
- · 25/30fps@4Mp(2688×1520)
- · WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- $\cdot$  Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- · 2.7mm ~13.5mm motorized lens
- · Max. IR LEDs Length 50m
- · Micro SD card memory, IP67,IK10, PoE+



quickly and accurately responds to monitoring events in a specific area. In addition to scene analytics, the camera supports face detection to quickly capture a face and upload the image to a server. The camera also offers tamper detection by recognizing a dramatic scene change and generating a warning message to inspect the camera.

### Protection(IP67, IK10, wide voltage)

The camera allows for  $\pm 30\%$  input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) and impact tests (IK10), the camera is the choice for installation in even the most unforgiving environments.

### Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.





# Eco Savvy 3.0 | DH-IPC-HDBW5431E-ZE

# **Technical Specification**

Camera					
Image Sensor		1/3" 4Megapixel progressive scan CMOS			
Effective Pixels		2688(H)x1520(V)			
RAM/ROM	RAM/ROM		512MB/32MB		
Scanning Syste	m	Progressive			
Electronic Shut	ter Speed	Auto/Manual, 1/3~1/100000s			
Minimum Illumination		0.03Lux/F1.4 (Color,1/3s,30IRE) 0.3Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)			
S/N Ratio		More than 50dB			
IR Distance		Distance up to 50m (164ft)			
IR On/Off Control		Auto/ Manual			
IR LEDs		3			
Lens					
Lens Type		Motorized/ Auto Iris(DC)			
Mount Type		Board-in			
Focal Length		2.7mm~13.5mm			
Max. Aperture		F1.4			
Angle of View		H: 106°~31°, V:58°~17°			
Optical Zoom		5x			
Focus Control		Motorized			
Close Focus Distance		0.3m			
	Lens	Detect	Observe	Recognize	Identify
DORI Distance	W	64(210ft)	26m(85ft)	13m(42ft)	6.5m(21ft)
	т	208m(682ft)	83m(272ft)	41m(136ft)	20m(68ft)
Pan/Tilt/Ro	tation				

Pan/Tilt/Rotation Range	Pan:0°~355°; Tilt:0°~65°; Rotation:0°~355°
Intelligence	
IVS	Tripwire, Intrusion, Object Abandoned/Missing
Advanced Intelligent Functions	Face Detection
Video	
Compression	H.265+/H.265/H.264+/H.264
Streaming Capability	3 Streams
Resolution	4M(2688x1520)/3M(2304x1296)/ 1080P(1920x1080)/ 1.3M(1280×960)/720P(1280×720)/ D1(704×576/704×480)/ VGA(640×480)/ CIF(352×288/352×240)
	Main Stream: 4M(1~25/30fps)
Frame Rate	Sub Stream: D1(1~25/30fps)
	Third Stream: 720P(1~25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 24~10240Kbps H.265: 14~9984Kbps

TIDMS

Day/NightAutol(CR) / Color / B/WBLC ModeBLC / HLC / WDR(I20dB)White BalanceAuto/Natural/Street Lamp/Outdoor/ManualGain ControlAuto/ManualNoise ReductionDDNRMotion DetetionOff / On (4 Zone, Rectangle)Region of InterestOff / On (4 Zone, Rectangle)Electronic Image Stabilization (Iss)N/ASmart IRSupportDefogN/ADigital Zoom6// On (4 Area, Rectangle)MirrorOff / On (4 Area, Rectangle)MirrorOff / On (4 Area, Rectangle)AudioSittl / G.Y.IMU/AAC/G.726Privacy MaskingG// 101 (A Area, Rectangle)NetworkIttl / G.Y.IMU/AAC/G.726ProtocolB.45 (10/100Base-T)ProtocolSittl / G.Y.IMU/AAC/G.726InteroperabilityONN/F.PSJ, CDP, ARP; RTSP; RTP; UDP; SMTP; FTP; Benjour, B02.1x, Multicast; ICMP; GMPS, SMTPInteroperabilityONN/F.PSJ, COG, ARD, SMTPStreaming MethodUnicast / MulticastMas. User AccessOmar 128GManagement SoftwareSmart PSS, DSS, Easy4ipAudio InterfaceIS.AndroidInterfaceIS.AndroidMarci Solowari 128GN/AAudio InterfaceICK NoopSO2001Mirce Solowari 226GN/AAudio InterfaceICK Internonly/Audio InterfaceICK Internonly/Audio InterfaceICK Internonly/Audio InterfaceICK Internonly/ProtocolSize Core and Isom A SyDC channel In: SmA SyDC channel Out: 300mA 12V		
White BalanceAuto/Natural/Street Lamp/Outdoor/ManualGain ControlAuto/NanualNoise Reduction3D DNRMotion DetetionOff / On (4 Zone, Rectangle)Region of InterestOff / On (4 Zone)Electronic Image Stabilization (EIS)N/ASmart IRSupportDefogN/ADigital Zoom16xFlip0'90'/180'/270°MirrorOff / On (4 Ace, Rectangle)MirrorOff / On (4 Ace, Rectangle)AudioOff / OnPrivacy MaskingOff / On (4 Ace, Rectangle)AudioCartla/G.711Mu/ AAC/ G.726ProtocolRJ-45 (10/100Base-T)ProtocolUnicast / Auticast (ICMP, IGMP, SNMP)ProtocolUnicast / Auticast (ICMP, IGMP, SNMP)InteroperabilityONVIF, PSIA, CGIStreaming MethodUnicast / MulticastManagement SoftwareSmart PSo, DSS, Easy4ipSmart PhoneIGE, Chrome, Firefox, SafariHonesULUUS0950-1 PCC: PCP tr 15 Subpart BVideo Interface1/1 channel In/OutAudio Interface1/1 channel In/OutAudio InterfaceN/AAudio InterfaceN/AAudio InterfaceN/AAudio Interface1/1 channel In: SmA SVDC channal ASVDC channal Cut: Souph A12VDCFeberricalDoclay, AC24V, PE+(802.abt)(Class 4)	Day/Night	Auto(ICR) / Color / B/W
Gain ControlAuto/ManualNoise Reduction3D DNRMotion DetetionOff / On (4 Zone, Rectangle)Region of InterestOff / On (4 Zone)Electronic Image StabilizationN/ASmart IRSupportDefogN/ADigital Zoom16xFlipO'907/1807/270°MirrorOff / On (4 Area, Rectangle)Privacy MaskingOff / On (4 Area, Rectangle)OmpressionCaflia Gain (100)NetworkProtocolProtocolR-45 (10/100Base-T)ProtocolUnicast / Multicast (CMP; SMPP, FTP; DEnojung 201): Multicast (CMP; GMP, GMP, SMPP, FTP; Denojung 201): Multicast (CMP; GMP, SMP, FTP; Denojung 201): Multicast (CMP; GMP, GMP, GMP, GMP, GMP, GMP, GMP, GMP,	BLC Mode	BLC / HLC / WDR(120dB)
Noise Reduction3D DNRMotion DetetionOff / On (4 Zone, Rectangle)Region of InterestOff / On (4 Zone)Electronic Image StabilizationN/ASmart IRSupportDefogN/ADigital Zoom16xFlip0'900'180'220'MirrorOff / On (4 Area, Rectangle)Privacy MaskingOff / On (4 Area, Rectangle)AudioCompressionCompressionG.71a / G.711Mu/ AAC / G.726NetworkProtocolProtocolUnices / Threy, HTP; HDP; SDNS; PPPOE; IPv4/v6; QoS; UPNP, MTP; Bonjour; 802.1s; Multicast; ICMP; IGMP; SMTP; FTP; Bonjour; 802.1s; Multicast; ICMP; IGMP;	White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Notion Detetion         Off / On (4 Zone, Rectangle)           Region of Interest         Off / On (4 Zone)           Electronic Image Stabilization (its)         N/A           Smart IR         Support           Defog         N/A           Digital Zoom         16x           Flip         0'90'/180'/270°           Mirror         Off / On           Privacy Masking         Off / On (4 Ace, Rectangle)           Mirror         Off / On (4 Ace, Rectangle)           Audio         Off / On           Privacy Masking         Off / On (4 Ace, Rectangle)           Audio         Off / On           Protocol         G71al G.711Mu/ AAC/ G.726           Network         Interoperability           Protocol         RJ-45 (10/100Base-T)           Interoperability         ONVIF, PSIA, CGI           Streaming Method         Unicast / Multicast; ICMP; IGMP; SMIP; FIP; DHCP; DMS; DDNS; PPPOE; IPv4/v6; QoS; UPMP, MIP; DSIG, PPOE; IPv4/v6; QoS; UPMP, MIP; DEGP BSIG, CGI           Web Viewer         Iol Star / Multicast; ICMP; IGMP; GIND           Wax, User Access         Iol Star / Multicast; ICMP; IGMP; GIND           Smart Phone         Ios, Android           Uscal PC for instant recording Mirco SD card 126GB         Iol Star / Ganed           Certifications<	Gain Control	Auto/Manual
Region of InterestOff / On (4 Zone)Flectronic Image Stabilization [Electronic Image Stabilization [Electronic Image Stabilization]SupportSmart IRSupportDefogN/ADigital Zoom16xFlip0'909'180'270°MirrorOff / OnPrivacy MaskingOff / On (4 Area, Rectangle)AudioCompressionCompressionG.711a/ G.711Mu/ AAC/ G.726NetworkHTTP; HTTP; TCP, ARP; RTSP; RTP; UDP; SMTP; FTP; Bonjour; 80.2.1x; Multicast; ICMP; ISMTP; FTP; Bonjour; 80.2.1x; Multicast; ICMP; ISMTP; FTP; Bonjour; 80.2.1x; Multicast; ICMP; ISMTP; GTPInteroperabilityONVIF, PSIA, CGIMax. User Access10 Users / 20 UsersKeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PS, DSS, Easy4ipSmart PhoneIOS, AndroidInterfaceCE (EN 60950-2000) ULUE0950-1 PCC: PC Part 15 Subpart BInterfaceJ/1 channel In/OutAudio Interface1/1 channel In/OutAudio InterfaceN/AAudio InterfaceN/AAudio InterfaceN/AAudio InterfaceN/AAudio InterfaceN/AAudio InterfaceN/AAudio InterfaceN/AAudio InterfaceN/AAudio InterfaceN/AFlectricalSupporter Support InformationAudio InterfaceN/AAudio InterfaceN/AAudio InterfaceN/AAudio InterfaceN/AAudio InterfaceN/AAu	Noise Reduction	3D DNR
Letronic Image Stabilization [EIS]N/ASmart IRSupportDefogN/ADigital Zoom16xFlip0'90'/180'/270°MirrorOff / OnPrivacy MaskingOff / On (4 Area, Rectangle)AudioCompressionCompressionG.711a/ G.711Mu/ AAC/ G.726NetworkFlipProtocolB.45 (10/1008ase-T)ProtocolNVIF, PSI-, CGP, ARP; RTSP; RTP; UDP; SMTP; FTP; Bonjour; 802.1x; Multicast; ICMP; ISMTP; ISMTP; FTP; Bonjour; 802.1x; Multicast; ICMP; ISMTP; ISMTP; FTP; Bonjour; 802.1x; Multicast; ICMP; ISMTP; ISMTP; ISMTP; FTP; Bonjour; 802.1x; Multicast; ICMP; ISMTP; IS	Motion Detetion	Off / On (4 Zone, Rectangle)
(EIS)NASmart IRSupportDefogNADigital Zoom16xFlip0'90'180'270°MirrorOff / OnPrivacy MaskingOff / On (4 Area, Rectangle)AudioCompressionCompressionG.711a/ G.711Mu/ AAC/ G.726NetworkFlipProtocolRJ-45 (10/1008ase-T)ProtocolPhitPi Physic Disk, Physic P	Region of Interest	Off / On (4 Zone)
DefogN/ADefogN/ADigital Zoom16xFlip0'90'/180'/270'MirrorOff / OnPrivacy MaskingOff / On (4 Area, Rectangle)AudioCompressionG.711a/ G.711Mu/ AAC/ G.726NetworkEthernetRJ-45 (10/100Base-T)ProtocolMITP; HTTPs; TCP; ARP; RTSP; RTP; UDP; SMTP; FTP; Bonjour; 802.1x; Multicast; ICMP; ISMP; SMMPInteroperabilityONVIF, PSIA, CGIStreaming MethodUnicast / MulticastMaagement SoftwareIsca PC for instant recording Mirco SD card 128GBWeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PSo, DSS, Easy4ipSmart PhoneIOS, AndroidCertificationsCE (EN 60950-2000) LYC BOSD-1 PCC: PCC Part 15 Subpart BInterface1/1 channel In/OutRS485N/AAlarm1 channel In: Sm A SVDC channel AUX SOMA 12VDCPower SupplyDC12V, AC24V, POE+(802.3at)(Class 4)	_	N/A
Digital Zoom16xDigital Zoom16xFlip0'90'/180'/270°MirrorOff / OnPrivacy MaskingOff / On (4 Area, Rectangle)AudioCompressionG.711a/ G.711Mu/ AAC/ G.726NetworkEthernetRJ-45 (10/100Base-T)ProtocolHTTP; HTTP; TCP; ARP; RTSP; RTP; UDP; SMTP; FTP; DHCP; DMS; DDMS; PPPOE; IPv4/v6; QoS; UPnP,MTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMPInteroperabilityONVIF, PSIA, CGIStreaming MethodUnicast / MulticastMax. User Access10 Users / 20 UsersEdge StorageNAS Local PC for instant recording Mirco SD card 128GBWeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PSS, DSS, Easy4ipSmart PhoneIOS, AndroidCertificationsCE (EN 60950:2000) HCC; FCC Part 15 Subpart BInterface1 Port(For adjustment only)Audio Interface1/1 channel In/OutAudio Interface1/1 channel In/OutAlarm1 channel In/OutAlarm1 channel In/S MA SVDC 1 channel Out: 300mA 12VDCElectricalPower SupplyPower SupplyD12V, AC24V, PoE+(802.3at)(Class 4)	Smart IR	Support
Fip0/90'/180'/270'MirrorOff / OnPrivacy MaskingOff / On (4 Area, Rectangle)AudioCompressionG.711a/ G.711Mu/ AAC/ G.726NetworkEthernetRJ-45 (10/100Base-T)ProtocolHTTP; HTTP; TCP; ARP; RTSP; RTP; UDP; SMTP; FTP; DPC; DMS; DDMS; PPPOc; IPv4/r6; QoS; UPNPATP; Bonjour; 80.21x; Multicast; ICMP; IGMP; SNMPInteroperabilityONVIF, PSIA, CGIStreaming MethodUnicast / MulticastMax. User Access10 Users / 20 UsersEdge StorageNAS Local PC for instant recording Mirco SD card 128GBWeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PSS, DSS, Easy4ipSmart PhoneIOS, AndroidCertificationsCE (EN 60950:2000) UL:UL06950-1 FCC: FCC Part 15 Subpart BInterface1 Port(For adjustment only)Audio Interface1/1 channel In/OutR5485NAAlarm1 channel In/OutPower SupplyDC12V, AC24V, PoE+(802.3at)(Class 4)	Defog	N/A
ImpInterfaceMirrorOff / OnPrivacy MaskingOff / On (4 Area, Rectangle)AudioCompressionCompressionG.711a/ G.711Mu/ AAC/ G.726NetworkFilternetEthernetRI-45 (10/100Base-T)ProtocolHTTP; HTTP; TCP; ARP; RTSP; RTP; UDP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; QoS; UPnP;NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMPInteroperabilityONVIF, PSIA, CGIStreaming MethodUnicast / MulticastMax. User Access10 Users / 20 UsersEdge StorageIE, Chrome, Firefox, SafariWeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PSS, DSS, Easy4ipSmart PhoneIOS, AndroidInterfaceVuideo InterfaceVideo Interface17 channel In/OutAudio Interface1/1 channel In/OutAudio InterfaceInformational studyAudio InterfaceDORT AUGUSTANDEPower SupplyDC12V, AC24V, PoE+(802.3at)(Class 4)	Digital Zoom	16x
Privacy MaskingOff / On (4 Area, Rectangle)AudioCompressionG.711a/ G.711Mu/ AAC/ G.726NetworkEthernetRJ-45 (10/100Base-T)ProtocolHTTP; HTTP; TCP; ARP, RTSP; RTP; UDP; SMTP; FTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMPInteroperabilityONVIF, PSIA, CGIStreaming MethodUnicast / MulticastMax. User Access10 Users /20 UsersEdge StorageNAS Local PC for instant recording Mirco SD card 128GBWeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PSS, DSS, Easy4ipSmart PhoneIOS, AndroidCertificationsCE (EN 60950-2000) U:UL60950-1 FC: FCC Part 15 Subpart BInterfaceVideo InterfaceVideo Interface1/1 channel In/OutAudio InterfaceN/AAudio InterfaceN/APower SupplyDC12V, AC24V, POE+(802.3at)(Class 4)	Flip	0°/90°/180°/270°
AudioAudioCompressionG.711a/ G.711Mu/ AAC/ G.726CompressionG.711a/ G.711Mu/ AAC/ G.726NetworkEthernetRJ-45 (10/100Base-T)ProtocolHTTP; HTTPs; TCP; ARP; RTSP; RTSP; MTP; UDP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPV4/v6; QoS; UPNP;NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMPInteroperabilityONVIF, PSIA, CGIStreaming MethodUnicast / MulticastMax. User Access10 Users /20 UsersEdge StorageNAS Local PC for instant recording Mirco SD card 128GBWeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PSS, DSS, Easy4ipSmart PhoneIOS, AndroidCertificationsCE (EN 60950-2000) UL:UL60950-1 FC: FCC Part 15 Subpart BInterfaceV/AAudio Interface1 Port(For adjustment only)Audio InterfaceN/AAudio InterfaceN/AAlarm1 channel In: SmA SVDC 1 channel Out: 300mA 12VDCElectricalPower SupplyPower SupplyDC12V, AC24V, PoE+(802.3at)(Class 4)	Mirror	Off / On
CompressionG.711a/ G.711Mu/ AAC/ G.726NetworkEthernetRJ-45 (10/100Base-T)ProtocolHTTP; HTTP; TCP; ARP; RTSP; RTP; UDP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; QoS; UPnP;NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMPInteroperabilityONVIF, PSIA, CGIMax. User Access10 Users / 20 UsersEdge StorageNAS Local PC for instant recording Mirco SD card 128GBWeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PSS, DSS, Easy4ipSmart PhoneIOS, AndroidCertificationsCE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart BInterface1/1 channel In/OutAudio Interface1/1 channel In/OutAlarm1 channel In: SmA SVDC 1 channel Out: 300mA 12VDcPower SupplyDC12V, AC24V, POE+(802.3at)(Class 4)	Privacy Masking	Off / On (4 Area, Rectangle)
NetworkEthernetRJ-45 (10/100Base-T)ProtocolHTTP; HTTP; TCP; AP; RTSP; RTP; UDP; SMTP; FTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMPInteroperabilityONVIF, PSIA, CGIStreaming MethodUnicast / MulticastMax. User Access10 Users /20 UsersEdge StorageIE, Chrome, Firefox, SafariWeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PSS, DSS, Easy4ipSmart PhoneIOS, AndroidCertificationsCE (EN 60950:2000) UL: UL60950-1 FCC: FCC Part 15 Subpart BInterface1/1 channel In: SmA SVDC 1 channel Out: 300mA 12VDcAddio InterfaceI channel In: SmA SVDC 1 channel Out: 300mA 12VDcPower SupplyDC12V, AC24V, POE+(802.3at)(Class 4)	Audio	
EthernetRJ-45 (10/100Base-T)EthernetRJ-45 (10/100Base-T)ProtocolHTTP; HTTP; TCP; ARP; RTSP; RTP; UDP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; QoS; UPnP;NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMPInteroperabilityONVIF, PSIA, CGIStreaming MethodUnicast / MulticastMax. User Access10 Users /20 UsersEdge StorageNAS Local PC for instant recording Mirco SD card 128GBWeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PSS, DSS, Easy4ipSmart PhoneIOS, AndroidCertificationsCE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart BInterface1/1 channel In/OutNdaio Interface1/1 channel In/OutRS485N/AAlarm1 channel In: SmA SVDC 1 channel Out: 300mA 12VDCElectricalPower SupplyPower SupplyDC12V, AC24V, PoE+(802.3at)(Class 4)	Compression	G.711a/G.711Mu/AAC/G.726
ProtocolHTTP; HTTPs; TCP; ARP; RTSP; RTP; UDP; SMTP; FTP; DPICP; DNS; DDNS; PPPOE; IPv4/v6; QoS; UPnP;NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMPInteroperabilityONVIF, PSIA, CGIStreaming MethodUnicast / MulticastMax. User Access10 Users /20 UsersEdge StorageNAS Local PC for instant recording Mirco SD card 128GBWeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PSS, DSS, Easy4ipSmart PhoneIOS, AndroidCertificationsCE (EN 60950:2000) UL: UL60950-1 PC: PCC Part 15 Subpart BInterface1/1 channel In/OutAudio InterfaceN/AAudio InterfaceN/AAlarm1 channel In: SmA SVDC thannel Out: 300mA 12VDCPower SupplyDC12V, AC24V, POE+(802.3at)(Class 4)	Network	
ProtocolDHCP; DNS; DDNS; PPPOE; IPv4/v6; QoS; UPnP;NTP; Bonjour; 802.1x; Multicast; ICMP; IGMP; SNMPInteroperabilityONVIF, PSIA, CGIStreaming MethodUnicast / MulticastMax. User Access10 Users /20 UsersEdge StorageNAS Local PC for instant recording Mirco SD card 128GBWeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PSS, DSS, Easy4ipSmart PhoneIOS, AndroidCertificationsCE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart BInterface1 Port(For adjustment only)Audio Interface1/1 channel In/OutRS485N/AAlarm1 channel In: SmA SVDC 1 channel Out: 300mA 12VDCPower SupplyDC12V, AC24V, PoE+(802.3at)(Class 4)	Ethernet	RJ-45 (10/100Base-T)
Streaming MethodUnicast / MulticastMax. User Access10 Users /20 UsersEdge StorageNAS Local PC for instant recording Mirco SD card 128GBWeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PSS, DSS, Easy4ipSmart PhoneIOS, AndroidCertificationsCE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart BInterface1 Port(For adjustment only)Audio Interface1 Port(For adjustment only)Audio InterfaceN/AAlarm1 channel In: SmA SVDC 1 channel Out: 300mA 12VDCElectricalPower SupplyDot2V, AC24V, PDE+(802.3at)(Class 4)	Protocol	DHCP; DNS; DDNS; PPPOE; IPv4/v6; QoS; UPnP;NTP;
Nax. User Access10 Users /20 UsersMax. User Access10 Users /20 UsersEdge StorageNAS Local PC for instant recording Mirco SD card 128GBWeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PSS, DSS, Easy4ipSmart PhoneIOS, AndroidCertificationsCE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart BInterface1 Port(For adjustment only)Audio Interface1 Port(For adjustment only)Audio InterfaceN/AAlarm1 channel In: SmA SVDC 1 channel Out: 300mA 12VDCElectricalPower SupplyDot2V, AC24V, PoE+(802.3at)(Class 4)	Interoperability	ONVIF, PSIA, CGI
Edge StorageNAS Local PC for instant recording Mirco SD card 128GBWeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PSS, DSS, Easy4ipSmart PhoneIOS, AndroidCertificationsCE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart BInterface1 Port(For adjustment only)Audio Interface1/1 channel In/OutRS485N/AAlarm1 channel In: SmA SVDC 1 channel Out: 300mA 12VDCElectricalPower SupplyPower SupplyDC12V, AC24V, PoE+(802.3at)(Class 4)	Streaming Method	Unicast / Multicast
Edge StorageLocal PC for instant recording Mirco SD card 128GBWeb ViewerIE, Chrome, Firefox, SafariManagement SoftwareSmart PSS, DSS, Easy4ipSmart PhoneIOS, AndroidCertificationsCertificationsCE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart BInterfaceVideo InterfaceVideo Interface1 Port(For adjustment only)Audio Interface1/1 channel In/OutRS485N/AAlarm1 channel In: 5mA SVDC 1 channel Out: 300mA 12VDCElectricalVOI2V, AC24V, PoE+(802.3at)(Class 4)	Max. User Access	10 Users /20 Users
Management SoftwareSmart PSS, DSS, Easy4ipSmart PhoneIOS, AndroidCertificationsCertificationsCertificationsCE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart BInterfaceInterfaceVideo Interface1 Port(For adjustment only)Audio Interface1/1 channel In/OutRS485N/AAlarm1 channel In: SmA SVDC 1 channel Out: 300mA 12VDCElectricalPower SupplyPower SupplyDC12V, AC24V, PoE+(802.3at)(Class 4)	Edge Storage	Local PC for instant recording
Smart PhoneIOS, AndroidCertificationsCertificationsCertificationsCE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart BInterfaceInterfaceVideo Interface1 Port(For adjustment only)Audio Interface1/1 channel In/OutRS485N/AAlarm1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDCElectricalPower SupplyPower SupplyDC12V, AC24V, PoE+(802.3at)(Class 4)	Web Viewer	IE, Chrome, Firefox, Safari
Certifications       CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B         Interface       Interface         Video Interface       1 Port(For adjustment only)         Audio Interface       1/1 channel In/Out         RS485       N/A         Alarm       1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC         Electrical       Power Supply         DC12V, AC24V, PoE+(802.3at)(Class 4)	Management Software	Smart PSS, DSS, Easy4ip
CertificationsCE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart BInterfaceVideo Interface1 Port(For adjustment only)Audio Interface1/1 channel In/OutRS485N/AAlarm1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDCElectricalPower SupplyDC12V, AC24V, PoE+(802.3at)(Class 4)	Smart Phone	IOS, Android
CertificationsUL:UL60950-1 FCC: FCC Part 15 Subpart BInterfaceVideo Interface1 Port(For adjustment only)Audio Interface1/1 channel In/OutRS485N/AAlarm1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDCElectricalPower SupplyPower SupplyDC12V, AC24V, PoE+(802.3at)(Class 4)	Certifications	
Video Interface       1 Port(For adjustment only)         Audio Interface       1/1 channel In/Out         RS485       N/A         Alarm       1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC         Electrical       DC12V, AC24V, PoE+(802.3at)(Class 4)	Certifications	UL:UL60950-1
Audio Interface     1/1 channel In/Out       RS485     N/A       Alarm     1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC       Electrical     Power Supply       DC12V, AC24V, PoE+(802.3at)(Class 4)	Interface	
RS485     N/A       Alarm     1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC       Electrical       Power Supply     DC12V, AC24V, PoE+(802.3at)(Class 4)	Video Interface	1 Port(For adjustment only)
Alarm     1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC       Electrical       Power Supply     DC12V, AC24V, PoE+(802.3at)(Class 4)	Audio Interface	1/1 channel In/Out
Alarm 1 channel Out: 300mA 12VDC Electrical Power Supply DC12V, AC24V, PoE+(802.3at)(Class 4)	RS485	N/A
Power Supply DC12V, AC24V, PoE+(802.3at)(Class 4)	Alarm	
	Electrical	
Power Consumption <15W	Power Supply	DC12V, AC24V, PoE+(802.3at)(Class 4)
	Power Consumption	<15W

# Eco Savvy 3.0 | DH-IPC-HDBW5431E-ZE

### Environmental

Operating Conditions	-30° C $\sim$ +60° C (-22° F $\sim$ +140° F) / Less than 95% RH
Strorage Conditions	-30° C $\sim$ +60° C (-22° F $\sim$ +140° F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10
Construction	
Casing	Metal
Dimensions	Φ159.1mm×117.9mm (6.26"×4.64")
Net Weight	0.95kg (2.09lb)
Gross Weight	1.20kg (2.65lb)

## **Ordering Information**

Туре	Part Number	Description	
4MP camera	DH-IPC- HDBW5431EP-ZE	4MP IR Dome Network Camera, WDR, PAL	
	DH-IPC- HDBW5431EN-ZE	4MP IR Dome Network Camera, WDR,NTSC	
	IPC- HDBW5431EP-ZE	4MP IR Dome Network Camera,WDR,PAL	
	IPC- HDBW5431EN-ZE	4MP IR Dome Network Camera, WDR,NTSC	
	PFA138	Junction Box	
	PFB302S	Wall mount	
	PFB201C	In-ceiling mount	
Accessories (optional)	PFB300C	Ceiling mount	
	PFA152-E	Pole mount	
	PFA101	Mount adapter	
	LR1002	ePoE Over Coax Converter	

# Accessories

Wall mount

# **Optional:**







Juntion Box

----

PFA152-E

Pole mount

PFB201C In-ceiling mount

LR1002 ePoE Over Coax Converter





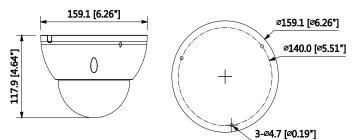


PFB300C Ceiling mount

PFA101 Mount adapter

In-ceiling Mount	Junction Mount	Pole Mount
PFB201C	PFA138	PFA101 + PFB302S + PFA152
0		
Ceiling Mount	Wall Mount	
PFA101 + PFB300C	PFA101 + PFB302S	

# Dimensions (mm/inch)





Rev 001.001 © 2017 Dahua. All rights reserved. Design and specifications are subject to change without notice.

