DH-PTZ19240V-IRB-N(-B)

2MP 40x Starlight IR PTZ Network Camera

· 1/2.8" 2Megapixels STARVIS™ CMOS
· Powerful 40x optical zoom
· Starlight technology
· H.265 Encoding
· Max. 50/60fps@1080P
· IR distance up to 300m
· Anti-corrosion, IP68

H.265	WDR	0.005 Lux	ICR D/N	IP68	Hi-PoE

System Overview

All-environment series can be used for CCTV applications range from simple monitoring applications to fully controllable digital video monitoring systems. The excellent pan and tilt functionality makes the guard tour capability a reliable surveillance aid to operator that need to monitor a vast area. The series adopts top-notch DSP and advanced image sensor, which can offer a high-performance and safe imaging solution. It offers rich appearance, IP68 rated for water/dust ingress and professional certifications, which enable this series can meet most of special requirements of video surveillance applications such as high ground surveillance, explosive and corrosive environment surveillance for chemical industry, refineries and oil & gas industry, etc.

Functions

Starlight Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.005 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

Ultra-Wide Dynamic Range

For applications with both bright and low lighting conditions that change quickly, Ultra WDR (140 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Auto-tracking

This feature controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene. The tracking action can be triggered manually or automatically by defined rules. Once a rule is triggered, the camera can zoom in and track the defined target automatically.

Smart Wiper

With Dahua smart wiper technology, the wiper can be start/stop automatically when the build-in rain senor discerns whether it rains. The technology could offer better surveillance performance against wet weather and reduce dependence on manual operation.

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.

Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from -50 °C to +70 °C (-58 °F to +158 °F) with 95% humidity. Subjected to rigorous dust and water immersion tests and certified to the IP68 Ingress Protection rating makes it suitable for demanding outdoor applications.

Protection

The camera allows for ±25% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 8KV lightning rating provides effective protection for both the camera and its structure against lightning.

Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) and PSIA (Physical Security Interoperability Alliance) specifications, ensuring interoperability between network video products regardless of manufacturer.

ONVIF PSIA

Technical Specification

Camera

Image Sensor	1/2.8" STARVIS™ CMOS
Effective Pixels	1920(H) x 1080(V), 2 Megapixels
Scanning System	Progressive
Electronic Shutter Speed	1/1s~1/30,000s
Minimum Illumination	Color: 0.005Lux@F1.2; 0Lux@F1.2 (IR on)
S/N Ratio	More than 55dB
IR Distance	Distance up to 300m (984ft)
IR On/Off Control	Auto/Manual
IR LEDs	8

Lens

Focal Length	4.5mm~180mm
Max. Aperture	F1.2 ~ F3.5
Angle of View	H: 67.5° ~ 1.7°
Optical Zoom	40x
Focus Control	Auto/Manual
Close Focus Distance	100mm~ 1000mm

DORI Distance

*Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.

Detect	Observe	Recognize	Identify
2469m(8100ft)	988m(3241ft)	494m(1621ft)	247m(810ft)

PTZ

Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: 0° ~ 360° endless, effective tilt angle: -55° ~ 223°, auto flip 180°
Manual Control Speed	Pan: 0.1° ~120° /s; Tilt: 0.1° ~60° /s
Preset Speed	Pan: 120° /s; Tilt: 60° /s
Presets	300
PTZ Mode	5 Pattern, 8 Tour, Auto Pan ,Auto Scan
Speed Setup	Human-oriented focal Length/ speed adaptation
Power up Action	Auto restore to previous PTZ and lens status after power failure
Idle Motion	Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period
Protocol	DH-SD, Pelco-P/D (Auto recognition)

Intelligence

Auto Tracking	Support
IVS	Tripwire, Intrusion,Abandoned/Missing, Face Detection

Video

Compression	H.265+/H.265/H.264+/H.264/MJPEG
Streaming Capability	3 Streams
Resolution	1080P(1920×1080)/1.3M(1280x960)/720P(1280×720)/D1(704×576/704×480)/CIF(352×288/352×240)
Frame Rate	Main stream: 1080P/1.3M/720P(1~50/60fps)
	Sub stream1: D1/CIF(1 ~ 25/30fps)
	Sub stream2: 1080P/1.3M/720P(1 ~ 25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.265/H.264: 256K ~ 8192Kbps, MJPEG: 4096K ~ 20480Kbps
Day/Night	Auto(ICR) / Color / B/W
Backlight Compensation	BLC / HLC / WDR(140dB)
White Balance	Auto, ATW, Indoor, Outdoor, Manual
Gain Control	Auto / Manual
Noise Reduction	Ultra DNR (2D/3D)
Motion Detetion	Support
Region of Interest	Support
Electronic Image Stabilization (EIS)	Support
Optical Defog	Support
Smart Wiper	Support
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas

Audio

Compression	G.711a/G.711mu/PCM/G.726/AAC/G722.1/G.729/MPEG2-Layer2

Network

Ethernet	RJ-45 (100Base-TX/1000Base-T)
Protocol	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
Interoperability	ONVIF, PSIA, CGI
Streaming Method	Unicast / Multicast
Max. User Access	20 users
Edge Storage	NAS (Network Attached Storage),Local PC for instant recording, Micro SD card 128GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS
Smart Phone	IOS, Android

Certifications

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB,ANSI C63.4- 2014 NEMA 4X: UL60950-1+CAN/CSA C22.2,No.60950-1

Interface

Video Interface	1
Audio I/O	1/1
RS485	1
Alarm I/O	7/2

Electrical

Power Supply	AC24V/5A(±25%), Hi-PoE
Power Consumption	35W, 60W (IR on, Heater on)

Environmental

Operating Conditions	For DH-PTZ19240V-IRB-N: 　AC 24V: -50°C ~ 70°C (-58°F ~ +158°F) 　Hi-PoE : -40°C ~ 70°C (-40°F ~ +158°F) For DH-PTZ19240V-IRB-N-B: 　-40°C ~ 70°C (-40°F ~ +158°F) Less than 95% RH
Ingress Protection	IP68
Vandal Resistance	N/A

Construction

Casing	Metal
Dimensions	Φ234(mm) x 205 (mm) x 405.5 (mm)
Net Weight	9.8kg(21.61lb)
Gross Weight	15.5kg(34.17lb)

Ordering Information

Type	Part Number	Description
2MP PTZ Camera	DH-PTZ19240V-IRB-N	2MP 40x Starlight IR PTZ Network Camera, WDR, Side outlets, PAL
	DH-PTZ19240VN-IRB-N	2MP 40x Starlight IR PTZ Network Camera, WDR, Side outlets, NTSC
	PTZ19240V-IRB-N	2MP 40x Starlight IR PTZ Network Camera, WDR, Side outlets, PAL
	PTZ19240VN-IRB-N	2MP 40x Starlight IR PTZ Network Camera, WDR, Side outlets, NTSC
	DH-PTZ19240V-IRB-N-B	2MP 40x Starlight IR PTZ Network Camera, WDR, Bottom outlets, PAL
	DH-PTZ19240VN-IRB-N-B	2MP 40x Starlight IR PTZ Network Camera, WDR,Bottom outlets, NTSC
	PTZ19240V-IRB-N-B	2MP 40x Starlight IR PTZ Network Camera, WDR, Bottom outlets, PAL
	PTZ19240VN-IRB-N-B	2MP 40x Starlight IR PTZ Network Camera, WDR,Bottom outlets, NTSC
Accessories	AC24V/5A	Power Supply
	DH-PFB731W	Wall Mount
	DH-PFA120A	Junction Box

Accessories

Included:

AC24V/5A
Power Supply

Optional :

DH-PFB731W
Wall Mount

PFA120A
Junction Box

Dimensions (mm)

Φ 234mm

405.4mm

Φ205mm