DH-SD10A260WA-HNF

2M 60x Starlight + IR PTZ AI Network Camera

- · 1/1.8" 2Megapixel CMOS
- · Powerful 60x optical zoom
- · Starlight+ technology
- · IR distance up to 450m
- · Deep-learning-based auto tracking and perimeter protection
- · Support metadata
- · Support Hi-PoE
- · Smart wiper
- · SMD Plus
- · IP67

AI series products adopt the most advanced AI technologies, including deep learning algorithms that primarily target people and vehicles, which provides higher flexibility and accuracy for end-users. This enables the Dahua AI series to offer various advanced applications such as Face Recognition, ANPR, Metadata, People Counting, traffic data statistics, etc. The complete lineup of Dahua AI includes network (PTZ) cameras, network video recorders, servers, and more devices. Beyond seeing the world, the power of AI allows devices to perceive the environment and understand the world in a better way.

System Overview

Dahua PTZ AI network camera adopts advanced CNN deep learning algorithms to support face recogniton with high accuracy. This camera possess wide monitor range, PFA algorithm that can always present a clear, focused image while zooming, and smart wiper technology that supported by RainSensor.

Functions

Metadata

Metadata is feature attribute information extracted from a target object which can be used for data retrieval. There are four kinds of metadata supported by Dahua PTZ AI camera: human face, human body, motor vehicle and non-motor vehicle metadata. Facial information includes gender, age, glasses, masks, beards, etc. Human body information includes hat, top, top color, bottom, bottom color, bag, etc. Motor vehicle information includes plate color, type, vehicle color, sunshield, ornament, calling, seatbelt, smoking, annual inspection sticker, etc. Non-motor vehicle information includes type, color, top type, top color, people number, etc.

Perimeter Protection

Automatically filtering out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improving alarm accuracy.

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 0.001 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

PFA Technology

PFA technology has innovatively introduced new methods of judgment to ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms. PFA ensures clarity of the image throughout the process of zooming and shortens focus time. The realization of PFA technology substantially improves user experience and increases product value.

Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from-40 °C to +70 °C (-40 °F to +158 °F) with 95% humidity. Subjected to rigorous dust and water immersion tests and certified to the IP67 Ingress Protection rating makes it suitable for demanding outdoor applications.

Protection

The camera allows for-5%~+10% 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) specifications, ensuring interoperability between network video products regardless of manufacturer.

SMD Plus

With Deep-Learning Algorithm, Dahua SMD Plus filters the motion detection alarm triggered by non-concerned target and recognizes human and vehicle effectvely, sending alarms when human and vehicle intrude.

Technical Specification

Camera

Image Sensor	1/1.8" STARVIS™ CMOS
Effective Pixels	2MP
Max. Resolution	1920 (H) × 1080 (V)
ROM	8GB
RAM	2GB
Electronic Shutter Speed	1/3 s–1/100000 s
Scanning System	Progressive Scanning
Min. Illumination	Color: 0.001Lux@F1.4 B/W: 0.0001Lux@F1.4 0Lux (IR light on)
IR Distance	450 m (1476.38 ft)
IR On/Off Control	Zoom Prio/Manual/SmartIR
IR LEDs Number	10
Wiper	Smart Wiper

Lens

Focal Length	5.6 mm–336 mm			
Max. Aperture	F1.4–F4.5			
Field of View	H: 64.9°–1.4°; V: 38.0°–0.8°; D: 72.2°–1.7°			
Optical Zoom	60x			
Focus Control	Auto/Semi-Auto/Manual			
Close Focus Distance	0.01 m–1.5 m (0.03 ft–4.92 ft)			
Iris Control	Auto/Manual			
DORI Distance	Detect	Observe	Recognize	Identify
	5120 m (16797.90 ft)	2048 m (6719.16 ft)	1024 m (3359.58 ft)	512 m (1679.79 ft)

PTZ

Pan/Tilt Range	Pan: 0°–360° (endless) Tilt: -30°–+90° (auto-flip 180°)
Manual Control Speed	Pan: 0.1°/s–200°/s Tilt: 0.1°/s–120°/s
Preset Speed	Pan: 240°/s Tilt: 200°/s
Presets	300
Tour	8 (up to 32 presets per tour)
Pattern Number	5
Scanning Number	5
Speed Adjustment	Support
Power-off Memory	Support
Idle Motion	Preset/Tour/Pattern/Scanning
Protocol	DH-SD Pelco-P/D (auto recognition)

General Intelligence

Event Trigger	Motion detection, Video tampering, Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomaly
General Intelligence	Object Abandoned/Missing

Artificial Intelligence

Metadata	Support human body, human face, motor vehicle and non-motor vehicle image capture and attributes extraction.
Perimeter Protection	Tripwire and intrusion. Support alarm triggering by target types (human and vehicle). Support filtering false alarms caused by animals, rustling leaves, bright lights, etc.
Auto Tracking	Support
Face Recognition	Support

Video

Compression	H.265+/H.265/H.264+/H.264/MJPEG (sub stream)
Streaming Capability	3 streams
Resolution	1080P (1920 × 1080); 1.3 M (1280 x 960); 720P (1280 × 720); D1 (704 × 576); CIF (352 × 288)
Frame Rate	Main stream: 1080P/1.3 M/720P (1–25/30fps) Sub stream 1: D1/CIF (1–25/30fps) Sub stream 2: 1080P/1.3 M/720P (1–25/30fps)
Bit Rate Control	Variable Bit Rate/Constant Bit Rate
Bit Rate	H.264: 32 kbps–8192 kbps H.265: 32 kbps–8192 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Support
WDR	120 dB
HLC	Support
White Balance	Auto/Indoor/Outdoor/Track/Manual/Sodium lamp/Natural light/Street lamp
Gain Control	Auto/Manual
Noise Reduction	2D/3D
Motion Detection	Support
Region of Interest (RoI)	Support
Electronic Image Stabilization	Support
Defog	Optical Defog
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas, and up to 8 areas in the same view

Audio

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

Network

Ethernet	RJ-45 (10/100Base-T)

Protocol	IPv4; IPv6; HTTP; HTTPS; 802.1x; Qos; FTP; SMTP; UPnP; SNMPv1/v2c/v3(MIB-2); DNS; DDNS; NTP; RTSP; RTP; TCP; UDP; IGMP; ICMP; DHCP; PPPoE; ARP; RTCP
Interoperability	ONVIF Profile S&G; CGI
Streaming Method	Unicast/Multicast
User/Host	20
Edge Storage	FTP; Micro SD card (256 G)
Browser	IE7 and newer versions Chrome 45 and newer versions Firefox 52ESR and earlier versions Safari (no version restrictions)
Management Software	Smart PSS, DSS, DMSS
Smart Phone	IOS/Android

Certification

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014"

Port

Video Interface	1 port (BNC, 1.0V[p-p], 75Ω)
RS-485	1
Audio In	1
Audio Out	1
Alarm Port	7/2

Power

Power Supply	DC36V/2.23A (±25%) Hi-PoE
Power Consumption	19W 42W (PTZ Pan/Tilt, IR light on, wiper on)

Environment

Operating Temperature	-40℃ to +70℃ (-40°F to +158°F)
Operating Humidity	≤95%
Ingress Protection	IP67; TVS 8000V lightning proof; Surge protection

Structure

Casing	Aluminium alloy ADC12
Dimensions	Φ300 mm × 527 mm (11.81" × 20.75")
Net Weight	13 kg (28.66 lb)
Gross Weight	18.2 kg (40.12 lb)

Ordering Information

Type	Model	Description
2M PTZ Camera	DH-SD10A260WA-HNF	2M 60x Starlight+ IR PTZ AI Network Camera, WDR,PAL
	DH-SD10A260WAN-HNF	2M 60x Starlight+ IR PTZ AI Network Camera, WDR,NTSC
	SD10A260WA-HNF	2M 60x Starlight+ IR PTZ AI Network Camera, WDR,PAL
	SD10A260WAN-HNF	2M 60x Starlight+ IR PTZ AI Network Camera, WDR,NTSC
Accessories	PFB710W	Wall Mount
	E080-1A360223B3	Power Adapter
		Mount Adapter

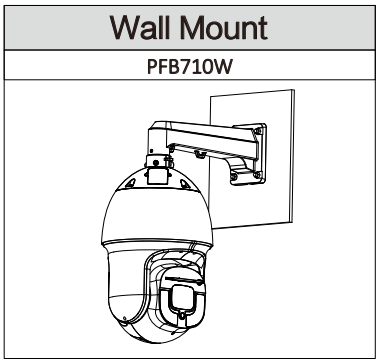
Accessories

Included:

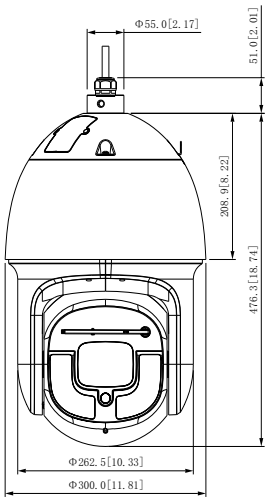
PFB710W
Wall Mount

E080-1A360223B3
Power Adapter

Mount Adapter



Dimensions (mm[inch])



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