DH-SDT4A404-4F-QA

X-spans 4MP+4MP 4x Wizmind Network PTZ Camera

- Detail channel: 1/1.8" 4Megapixel STARVIS^{TM} CMOS；
- Overview channel: 1/2.8"4Megapixel STARVIS^{TM} CMOS
- 4x optcal zoom
- Max. 25/30 fps@4M
- Auto tracking
- Classroom Behavior Analysis
- Behavior Analysis in Examinaton Room

Series Overview

The Dahua Professional Intelligent Camera sets a new standard for intelligent devices by offering an extensive range of functions. It is specifically engineered to cater to diverse scenarios, distinguishing itself from conventional intelligent cameras.

Functions

Starlight+ Technology

For challenging low-light conditions, Dahua's Starlight Ultra-low Light Technology has exceptional light sensitivity, capturing images in vivid detail, even in lighting as low as 0.001 lux. The camera uses a set of optical features to balance light throughout the scene, producing clear images in dark environments.

Face Recognition

Face attributes are extracted from captured faces, and stored in a database where they can be conveniently searched for and compared against other images. Once a successful match is found, the system outputs the result. The Dahua Face Recognition camera supports a built-in database that stores up to 10,000 face images, allowing the camera to capture and compare face images in real time.

Standing Up Detection

Detects when people stand up and zooms in on them.

Classroom Behavior Analysis

Analyzes student behavior in classrooms by detecting 6 activities: Reading and writing, hand-raising, active listening, leaning on the desk, phone usage, and turning around.

Behavior Analysis in Examination Room

Analyzes student behavior in examination rooms by detecting 8 activities: Writing, hand-raising, picking up objects, turning around or looking back, standing up, placing hands under the desk and lowering the head, passing objects, and phone usage.

Technical Specification

Camera

Image Sensor	Panorama: 1/2.8" CMOS; Detail: 1/1.8" CMOS
Pixel	Panorama: 4 MP; Detail: 4 MP
Max. Resolution	Panorama: 2560 (H) × 1440 (V); Detail: 2688 (H) × 1520 (V)
ROM	8 GB
RAM	4 GB
Electronic Shutter Speed	1s–1/30,000 s
Scanning System	Progressive
Min. Illumination	Panorama: 0.005 lux@F2.2 (Color, 30 IRE); 0.0005 lux@F2.2 (B/W, 30 IRE) Detail: 0.001 lux@F1.7 (Color, 30 IRE); 0.0001 lux@F1.7 (B/W, 30 IRE)

Lens

Focal Length	Panorama: 2.2 mm; Detail: 8 mm–32 mm
Max. Aperture	Panorama: F2.2; Detail: F1.7
Field of View	Panorama: H: 122°; V: 72°; D: 139°; Detail: H: 15°–42°; V: 8°–23°; D: 17°–49°
Optical Zoom	4×
Focus Control	Auto; semi-auto; manual;
Close Focus Distance	Panorama: 0.2 m; Detail: 1.5 m–2.5 m
Iris Control	Panorama: NA; Detail: Manual, auto, iris prio

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	Panorama: 2.2 mm; Detail: 8 mm–32 mm	441.4 m (144.36 ft)	174.3 m (57.09 ft)	88.3 m (28.87 ft)	44.1 m (14.44 ft)

*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.

PTZ

Pan/Tilt Range	Pan: 0° to 180° not endless; Tilt: −10° to +90°
Manual Control Speed	Pan: 9°/s–170°/s; Tilt: 3°/s–160°/s
Preset Speed	Pan: 0°/s–200°/s; Tilt: 0°/s–120°/s
Preset	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5
Power-off Memory	Yes
Idle Motion	Preset;Pattern;Tour;Scan

Intelligence

Face Recognition	Supports face detection, optimization, capturing pictures, uploading high-quality face snapshots and enhancing face images. Attribute extraction is also supported, where 6 attributes and 8 expressions can be detected. Face cutout is also offered, where you can cutout one face at a time and customize the size to be a one-inch photo. It supports up to 5 face databases, where people can be added one by one or in batches. The face similarity can also be set, and faces can be compared against 10,000 faces.
Classroom Behavior Analysis	Analyzes student behavior in classroms by detecting 7 activities: Reading and writing, standing up, hand-raising, active listening, leaning on the desk, phone usage, and turning around. It also supports attendance management.
Behavior Analysis in Examination Room	Analyzes student behavior in examination rooms by detecting 8 activities: Writing, hand-raising, picking up objects, turning around or looking back, standing up, placing hands under the desk and lowering the head, passing objects, and phone usage.

Video

Video Compression	H.265;H.264B;H.264M;H.264H;MJPEG(Sub Stream 1)
Streaming Capability	3 streams
Resolution	Panorama: 4M (2560 × 1440); 1080p (1920 × 1080); 960p (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240); Detail: 4M (2688 × 1520); 4M (2560 × 1440); 1080p (1920 × 1080); 960p (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Video Frame Rate	Panorama: Main stream: 4M/1080p/1.3M/720p@(1-25/30 fps) Sub stream 1: 1080p/1.3M/720p@ (1-25/30 fps) Sub stream 2: D1/VGA/CIF @(1-25/30 fps); Detail: Main stream: 2688×1520/4M/1080p/1.3M/720p @(1-25/30 fps) Sub stream 1: 1080p/1.3M/720p@ (1-25/30 fps) Sub stream 2: D1/VGA/CIF @(1-25/30 fps);
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 32 kbps–8,192 kbps H.265: 32 kbps–8,192 kbps
Day/Night	Panorama: Color/B/W Detail: Auto (ICR); color/B/W
BLC	Panorama: Yes; Detail: Yes
WDR	DWDR
HLC	Panorama: Yes; Detail: Yes
White Balance	Panorama: Auto; outdoor; manual; region custom; natural light; street lamp Detail: Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp
Gain Control	Panorama: Auto; manual Detail: Auto; manual

Noise Reduction	Panorama: 3D NR Detail: Auto: 2D NR; 3D NR
Region of Interest (RoI)	Yes
Defog	Panorama: NA Detail: Electronic
Digital Zoom	16×
S/N Ratio	Panorama: ≥55 dB Detail: ≥55 Db

Audio

Audio Compression	PCM; G.711a ; G.711Mu; G726; MPEG2-Layer2; G722.1; G729; G723

Network

Network Port	RJ-45 (10/100 Base-T)
Network Protocol	HTTP;HTTPS;IPv4;RTSP;UDP;SMTP;NTP;DHCP;DNS;DDNS;IPv6;802.1x;QoS;FTP;UPnP;ICMP;SNMP;SNMPv1/v2c/v3(MIB-2);IGMP;ARP;RTCP;RTP;PPPoE;RTMP;TCP
Interoperability	ONVIF (Profile S & Profile G);CGI
User/Host	20 (total bandwidth: 64 M)
Storage	Micro SD card (up to 512 GB); FTP/SFTP; NAS
Browser	Web 5.0: IE 9 and later versions; Chrome 41 and later versions; Firefox 50 and later versions; Safari 10 and later versions

Certification

Certifications	EN 50130-4 EN 55032 EN 55035 EN 61000-3-3 EN IEC 61000-3-2 EN 62368-1

Port

Audio Input	1 channel (LINE IN, bare wire)
Audio Output	1 channel (LINE OUT,bare wire)
Alarm Input	2 (on-off value input: 0–5 VDC)
Alarm Output	1 channel
Alarm Linkage	Capture; preset; tour; pattern; record; alarm digital output; audio; send email
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; power exception detection

Power

Power Supply	12 VDC, 3 A ± 10% (included); PoE (802.3at)
Power Consumption	Basic: 15 W; Max: 19 W (PTZ movement)
Power Adapter	Included

Environment

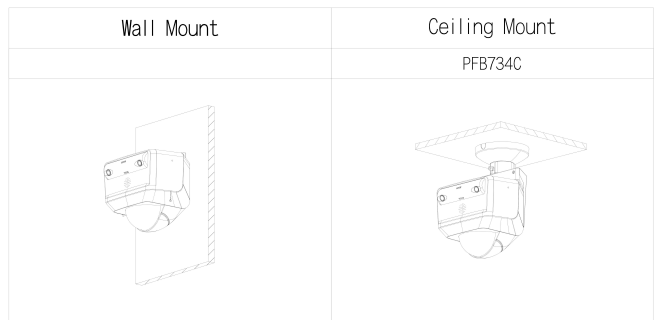| Operating Temperature	-10 °C to +50 °C (+14 °F to +122 °F)
Operating Humidity	≤95%

Structure

Casing Material	PC; ADC12
Product Dimensions	200 mm × 190 mm × 157 mm (7.87" × 7.48" × 6.18") (L × W × H)
Net Weight	2.3 kg (5.07 lb)
Gross Weight	3.1 kg (6.83 lb)

Ordering Information

Type	Model	Description
Network PTZ Camera	DH-SDT4A404-4F-QA	X-spans 4MP+4MP 4x Wizmind Network PTZ Camera

Installation

Wall Mount	Ceiling Mount
	PFB734C

Dimensions (mm[inch])

199.1 [7.84]   158.0 [6.22]   190.2 [7.49]