

IP Camera

VIA-IPC-4B-FR-VIHAY



The **VIA-IPC-4B-FR-VIHAY** is a high-performance 4 MP network camera engineered for advanced analytics and excellent low-light performance via TrueView technology.

The device utilizes a 1/1.8» Progressive Scan CMOS sensor and a 2.8 to 12 mm varifocal lens, ensuring clear imaging even against strong backlight thanks to 150 dB WDR technology.

It features extensive deep-learning capabilities—including multi-target-type detection, face capture, and people counting—alongside.

Designed for extreme conditions, the aluminum alloy camera includes a built-in heater, Gyro sensor, and power meter, and is highly durable with IP67 water and dust resistance, IK10 vandal proofing, and a NEMA 4X anti-corrosion rating

Key Capabilities

- ✓ 4 MP resolution (2688 × 1520)
- ✓ 2.8 to 12 mm varifocal lens with P-iris control
- ✓ TrueView technology for excellent low-light imaging
- ✓ 150 dB WDR
- ✓ H.265 / H.264 video compression
- ✓ Deep learning analytics, including multi-target detection, face comparison, and people counting
- ✓ IP67 weather resistance, IK10 vandal proofing
- ✓ NEMA 4X anti-corrosion rating
- ✓ Support for microSD up to 1 TB

VIA Security

 **UKRAINIAN
BRAND**

Fusion ILLUMINATION



SPECIFICATION

CAMERA

Image Sensor

1/1.8" Progressive Scan CMOS

Max. Resolution

2688 × 1520

Min. Illumination

Color: 0.0005 Lux @ (F1.2, AGC ON), B/W: 0.0001 Lux @ (F1.2, AGC ON), B/W: 0 Lux with IR

Shutter Time

1 s to 1/100,000 s

Day & Night

IR cut filter, Blue glass module (less ghost phenomenon)

OPTICAL SYSTEM

Focal Length & FOV

2.8 to 12 mm, horizontal FOV 106° to 41.8°, vertical FOV 55.4° to 23.6°, diagonal FOV 130° to 48.1°

Focus

Auto, Semi-auto, Manual

Iris Type

P-iris

Aperture

2.8 to 12 mm: F1.38 to F2.53

ILLUMINATION

Supplement Light Type

IR

Supplement Light Range

2.8 to 12 mm: Monitoring: 60 m

Smart Supplement Light

Yes

IR Wavelength

850 nm

VIDEO PROCESSING & ENCODING

Main Stream

Monitoring mode: 50 Hz: up to 50 fps (2688 × 1520, 1280 × 720), up to 100 fps (1920 × 1080); 60 Hz: up to 60 fps (2688 × 1520, 1280 × 720), up to 120 fps (1920 × 1080),

*High frame rate is supported under monitoring mode only.

Smart mode: 50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720); 60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720)

Sub-Stream

50 Hz: 25 fps (1280 × 720, 704 × 576, 640 × 480); 60 Hz: 30 fps (1280 × 720, 704 × 480, 640 × 480)

Third Stream

50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480); 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480)

Fourth Stream

50 Hz: 25 fps (704 × 576, 640 × 480); 60 Hz: 30 fps (704 × 480, 640 × 480)

Fifth Stream

50 Hz: 25 fps (704 × 576, 640 × 480); 60 Hz: 30 fps (704 × 480, 640 × 480)

Video Compression

Main stream: H.265/H.264, Sub-stream: H.265/H.264/MJPEG, Third stream: H.265/H.264, Fourth stream: H.265/H.264/MJPEG, Fifth stream: H.265/H.264/MJPEG

Video Bit Rate

32 Kbps to 8 Mbps

H.264 Type

Baseline Profile, Main Profile, High Profile

H.265 Type

Main Profile

Bit Rate Control

CBR, VBR

Scalable Video Coding (SVC)

H.264 and H.265 encoding

Region of Interest (ROI)

4 fixed regions for each stream

Target Cropping

Yes

e-PTZ

Support Patrol and Auto Tracking settings

AUDIO CAPABILITIES

Audio Type

Mono sound

Audio Compression

G.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC

Audio Bit Rate

64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC-LC)

Audio Sampling Rate

8 kHz/16 kHz/32 kHz/48 kHz

Environment Noise Filtering

Yes

NETWORK & CYBERSECURITY

Protocols

TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, DHCP, DNS, DDNS, SRTP, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, ARP, WebSocket, WebSockets

Simultaneous Live View

Up to 20 channels

API

SDK, ONVIF (Profile S, Profile G, Profile T, Profile M)

User/Host

Up to 32 users, 3 user levels: administrator, operator, and user

Security

Password protection, complicated password, HTTPS encryption, 802.1X authentication (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP OVER HTTPS, Control Timeout Settings, Security Audit Log, TLS 1.2, TLS 1.3, TPM 2.0 (FIPS 140-2 level 2), AES128/256

Network Storage

NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR)

Web Browser

Plug-in required live view: IE 10, IE 11, Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Edge 89+, Safari 11+, Local service: Chrome 57.0+, Firefox 52.0+, Edge 89+

IMAGE

Image Parameters Switch

Yes

Image Settings

Rotate mode, saturation, brightness, contrast, sharpness, white balance, AGC, adjustable by client software or web browser

Day/Night Switch

Day, Night, Auto, Schedule, Alarm Trigger

Wide Dynamic Range (WDR)

150 dB

Image Enhancement

BLC, HLC, 3D DNR, Distortion Correction, Defog

Privacy Mask

8 programmable polygon privacy masks

SNR

≥ 52 dB

Picture Overlay

LOGO picture can be overlaid on video with 128 × 128 24 bit bmp format

Image Stabilization

EIS

INTERFACE

Video Output

1 Vp-p Composite Output (75 Ω/CVBS) (Only for debugging)

Ethernet Interface

1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet port

On-Board Storage

Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 1 TB

Audio

1 input (line in), two-core terminal block, 1 output (line out), two-core terminal block

Alarm

2 inputs, 2 outputs (max. 24 VDC/24 VAC, 1 A)

RS-485

1 RS-485 (Half duplex, Pelco-P, Pelco-D, self-adaptive)

Reset Key

Yes

Power Output

12 VDC, max. 100 mA

EVENT

Basic Event

Motion detection (support alarm triggering by specified target types (human and vehicle)), video tampering alarm, video quality diagnosis, exception (network disconnected, IP address conflict, illegal login, abnormal restart, HDD full, HDD error), vibration detection

Smart Event

scene change detection, audio exception detection, defocus detection

Linkage

Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture, audible warning

DEEP LEARNING FUNCTION

Multi-target-type Detection

Supports simultaneous detection and capture of human body, face, and vehicle, Gets 7 face features, Gets 13 human body features, Gets 2 vehicle features, Supports counting the number of line crossing targets by type, including human body, non-motor vehicle, motor vehicle, Supports dynamic mosaic mask

Face Capture

Detects up to 120 faces simultaneously, captures up to 40 face pictures per frame simultaneously and uploads up to 10 face pictures per second, Supports swing left and right from -60° to 60°, tilt up and down from -30° to 30°, Uploads face with background and closed-up face pictures, Supports best shot and quick shot for capture mode, Supports dynamic mosaic mask, Gets 7 face features

Face Comparison

Up to 10 face libraries. 30,000 faces for each library. 150,000 faces in total, Supports face library encryption

People Counting

Supports Multi-Dimension People Counting, Supports counting, displaying and exporting the people flow data of entering, exiting and passing by (The data is stored in the flash.), Supports real-time uploading and uploading by statistic cycle, Supports generating daily, weekly, monthly or annually reports, Supports dynamic deduplication based on face picture comparison, and can filter out the target with the same custom face pictures, same attributes, or filter out repeated invalid targets within the set time interval, Supports face feature deduplication, Supports people flow data replenishment

Perimeter Protection

Line crossing, intrusion, region entrance, region exiting Support alarm triggering by specified target types (human and vehicle), Support combined event alarm triggering

Queue Management

Supports up to 8 detection regions, and independent arming schedule and linkage method, Supports 2 detection modes: regional people queuing-up, waiting time detection, Generates reports to compare the efficiency of different queuing-ups and display the changing status of one queue, Supports raw data export for further analysis, Supports real-time data uploading and scheduled data uploading, Regional people queuing-up: supports 4 alarm trigger conditions, including greater than threshold, less than threshold, equal to threshold, not equal to threshold Waiting time detection: supports 1 alarm trigger condition, including greater than threshold

Heat Map

A graphic description of visits (by calculating amount of people or amount of dwell time) in a configured area. Two report types are available, space heat map and time heat map line chart.

Hard Hat Detection

Detects up to 30 human targets simultaneously, Supports up to 4 shield regions

Metadata

Intrusion detection, line crossing detection, region entrance detection, region exiting detection, face capture, multi-target-type detection

Regional People Counting

Supports up to 8 detection regions, and independent arming schedule and linkage method, Supports 3 detection modes: people density detection, number of people exception detection, waiting time exception detection, Supports parameter settings: alarm times per exception, alarm interval, first alarm delay, Supports searching real-time number of people, People density detection: supports scheduled uploading, number of people change uploading, congestion level uploading, Number of people exception detection: supports 6 alarm trigger conditions, including greater than threshold A, less than threshold A, equal to threshold A, not equal to threshold A, greater than threshold A and less than threshold B, less than threshold A or greater than threshold B (threshold A should be less than threshold B) Waiting time exception detection: supports 3 alarm trigger conditions, including greater than threshold A, less than threshold A, greater than threshold A and less than threshold B (threshold A should be less than threshold B)

On/Off Duty Detection

Supports up to 8 detection regions, and independent arming schedule and linkage method, Supports 2 detection modes: absence detection, on/off duty detection, Supports parameter settings: person on duty, absence duration

GENERAL
Power

three-core terminal block, 12 VDC \pm 20%, 1.88 A, max. 22.56 W, 24 VAC \pm 20%, 1.57 A, max. 21.5 W, PoE: IEEE 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.53 A to 0.4 A, max. 22.6 W

Material

Aluminum alloy body

Dimension

With -Y: \varnothing 140 mm \times 377.4 mm (\varnothing 5.5" \times 14.9"), Without -Y: \varnothing 144.1 mm \times 374.7 mm (\varnothing 5.7" \times 14.8")

Package Dimension

425 mm \times 190 mm \times 180 mm (16.7" \times 7.5" \times 7.1")

Weight

Approx. 2170 g (4.78 lb.)

With Package Weight

Approx. 3275 g (7.22 lb.)

Storage Conditions

-40 °C to 65 °C (-40 °F to 149 °F). Humidity 95% or less (non-condensing)

Startup and Operating Conditions

-40 °C to 65 °C (-40 °F to 149 °F). Humidity 95% or less (non-condensing)

Language

Multi-language interface including English, Ukrainian, Russian and additional international languages.

General Function

Heartbeat, anti-banding, one-key reset, mirror, password protection, flash log

Heater

Yes

Demist

Yes

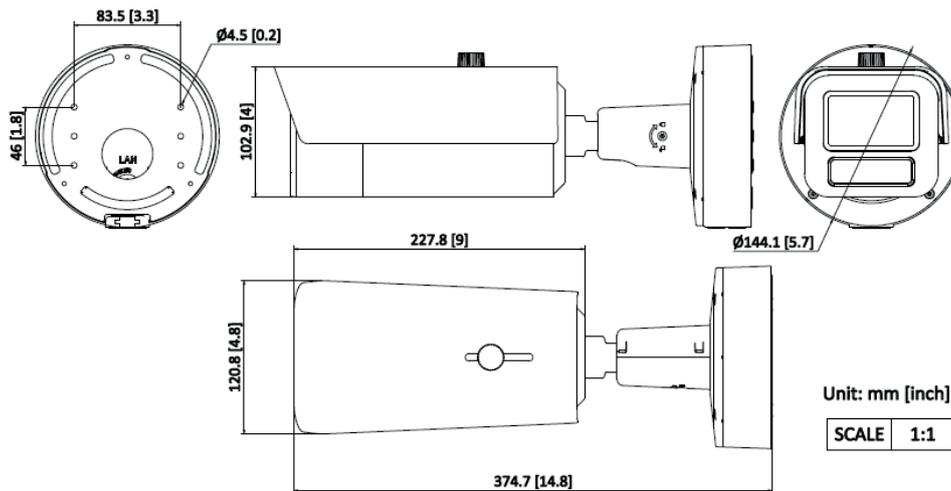
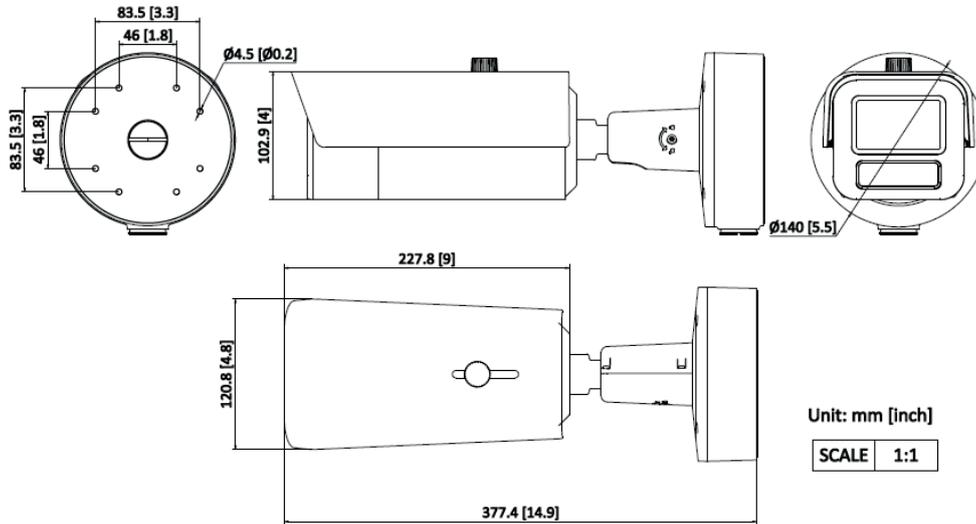
Protection

IP67, IK10

Anti-Corrosion Protection

NEMA 4X

DIMENSIONS



*Product in box may vary in appearance and specifications.



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