2MP ANPR Bullet Camera

HC121



Features

Optics

- Starlight optical sensor and integrated IR illuminator produce clear images in night environments and reduce light pollution.
- 4 LED IR illumination beads provide up to 50m illumination.
- 2MP industrial-grade sensor delivers 1920 x 1080 images.
- Motorized zoom lens enables flexible focal length adjustment and easy installation.
- Automatic gain control, white balance, and WDR for various light conditions.

Compression

- Up to 1080P@60fps image collection format.
- 1 image stream, 3 video streams.
- Up to 1080P@60fps live video streams.
- Advanced H.265 encoding technology improves compression efficiency.
- Custom OSD allows various vehicle information to be overlaid on the video image.

Functions

- Built-in vehicle&license plate recognition algorithm can recognize standard license plates of multiple countries.
- Supports simultaneous application to road and entry/exit scenes without switching.
- Supports license plate detection and recognition for up to 2 lanes in road scenes.
- Supports capturing vehicle head only.
- Supports recognition of up to 10 vehicle body colors.
- Supports allowlist and blocklist configuration.
- Supports vehicle access control when connected to a barrier.
- Supports Micro SD cards of up to 128GB.
- Supports Automatic Network Replenishment (ANR), the camera

can automatically store video to its SD card in case of network disconnection.

Supports audio acquisition and intercom.

Network

- Network auto-adaptability ensures fluent live video in relatively bad network conditions such as packet loss.
- Supports SNMP.
- Supports UNP for NAT traversal between public and private networks.
- Supports integration by the third party via SDK or HTTP.

Network Security

- Supports authorized user access by password. Weak password detection and account lock-up when failed login attempts reach the upper limit enhance password security.
- Supports HTTPS.
- RTSP authentication prevents unauthorized video stream requests.
- IP address filtering prevents illegal access from untrusted IP addresses.
- Gateway ARP protection prevents MAC address spoofing.

Structure

- Supports DC 12V, and PoE (802.3at) power supplies.
- Cast aluminum body offers excellent heat dissipation.
- 3-axis mounting bracket for various installation scenarios.
- Junction box for cabling.
- IP67, IK10.

Specifications

HC121	TS8CR-Z		
Camera	Description		
Sensor	1/2.8" 2MP CMOS		
Focal length	4.7 to 47mm, motorized zoom		
Shutter	Auto/Manual, range: 1/25 to 1/100000 s		
Minimum illumination	0.001lux (F1.6)		
Image	Description		
Image collection format	1080P@25 (default), 1080P@30, 1080P@50, 1080P@60		
Resolution	Main stream: 1080P (default), 720P, D1 Sub stream: 720P (default), D1, 2CIF, CIF Third stream: D1 (default), 2CIF, CIF		
Frame rate	60, 50, 30, 25 (default), 22, 20, 18, 16, 15, 12.5, 10, 8, 6, 5, 4, 3, 2, 1		
Video compression	H.264 (default), H.265		
ROI	Supports up to 8 regions		
Video OSD	Supports 8 overlay areas and allows contents including date, time, date&time, zoom ratio, custom contents		

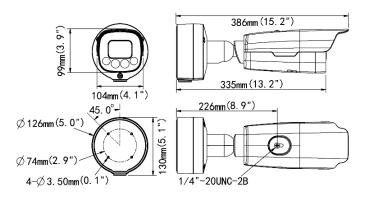
uniview

DATASHEET

Image OSD	Supports 8 overlay areas and allows contents including time, license plate number, device ID, camera ID, vehicle body color, allowlist, image authentication ID, custom contents (3 items), location		
Smart	Description		
Application scenario	Vehicle speed ≤90km/h Supports simultaneous application to road and entry/exit scenes without switching Supports license plate detection and recognition for up to 2 lanes in road scenes		
Vehicle detection mode	Video (default) or inductive loop		
Capture vehicle head only	Support		
License plate number recognition	Supports recognition of license plates with numbers and letters by default		
Vehicle body color recognition	Supports 10 colors: red, green, blue, yellow, white, gray, black, purple, brown, pink		
List configuration	Supports allowlist and blocklist configuration, each list allows 20,000 items Supports import, export, add, and delete operations		
Barrier opening policy	Open barrier only for the recognized vehicles Open barrier for all vehicles Open barrier only for vehicles on the allowlist Open barrier for vehicles not on the blocklist Configurable Boolean output ID		
Storage	Description		
Edge storage	Supports ANR with a Micro SD card, up to 128GB		
Structure	Description		
	Built-in integrated illumination module, including 4 IR LEDs, 50m illumination distance, automatic on/off control		
Illumination			
Illumination Sunshield			
	on/off control		
Sunshield	on/off control Long sunshield		
Sunshield Bracket	on/off control Long sunshield 3-axis mounting bracket The camera comes with a junction box for storing		
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Sunshield Bracket Junction box Interface	on/off control Long sunshield 3-axis mounting bracket The camera comes with a junction box for storing tail cable Description 1 × 10M/100M RJ45 1 × RS485		
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Sunshield Bracket Junction box Interface Network interface Serial port Boolean output Boolean input Audio interface Storage interface General	on/off control Long sunshield 3-axis mounting bracket The camera comes with a junction box for storing tail cable Description 1 × 10M/100M RJ45 1 × RS485 1 relay output, withstand voltage: AC 125V/0.3A, DC 30V/1A 2 inputs, supports level/Boolean, with max level up to DC 5V 1 × audio input, 1 × audio output 1 × Micro SD card slot Description DC12V + 25% - 10%		

Weight	2kg	
Operating environment	-40°C to 60°C, ≤90% RH	
Ingress protection	IP67, IK10	

Dimensions



Application

The HC121 series is mainly used to recognize vehicle license plates on low-speed roads (such as roads near the entrance/exit of parks, city paths, and lanes in underground parking lots). With an intelligent illumination system, it can detect, recognize and capture vehicles in all weather conditions. It features high vehicle capture rate and high plate recognition accuracy.

Order Information

Model	Configuration	Remarks	
HC121	TS8CR-Z	2MP ANPR Bullet Camera (4.7 to 47mm, starlight, PoE, H.265, IR)	

Recommended Accessories

Mount	Bracket	Example	Remarks
Wall	N	N	Use the mount kit delivered
mount	N N	N N	with the camera
Pendant	1	\ \	Use the mount kit delivered
mount	1	N N	with the camera
Pole mount	TR-UP06 -C-IN		Pole Mount Adapter

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*Product specifications and availability are subject to change without notice.