

# 2MP ANPR Bullet Camera

HC121



## Features

### Optics

- Starlight optical sensor capable of capturing and recognizing vehicles in low light environment when collaborating with integrated built-in illuminators
- 2MP industrial quality sensor, 1920\*1080 video image resolution
- Motorized zoom lens, flexible adjustment of focus range according to the scene, easy installation
- Automatic gain control, white balance, and WDR, ideal for various lighting conditions

### Compression

- Supports 1080P@60fps image collection
- Supports one image stream, triple video streams
- Supports 1080P@60fps live video streams
- H.265
- Custom OSD of various vehicle information

### Functions & features

- Built-in vehicle & license plate recognition algorithm can recognize standard license plates of multiple countries.
- Recognizes vehicle body colors and characteristics (daytime)
- Supports blacklist and whitelist configuration
- Collaborates with lanes to control the entry & exit of vehicles and trigger gate opening
- Supports the switch between road mode and entry/exit mode
- 8GB eMMC, expansion up to 256GB
- Supports edge storage to prevent data loss in case of disconnected network
- Tamper-proof info and records
- Supports identification of fake license plates
- Provides multiple 3rd-party integration methods including SDK and Socket.

## Network

- Network adaption ensures effective surveillance even in abnormal environments such as packet loss
- Supports SNMP and SIP
- UNP technology for NAT traversal

## Network Security

- Supports user authorization and password, detection of weak password, and account lock-up when failed login attempts reaches the limit
- Supports secure Web access through HTTPS
- Supports RTSP authentication prevents unauthorized video request
- Supports IP address filtering
- Supports gateway ARP protection to prevent MAC address spoofing

## Structure

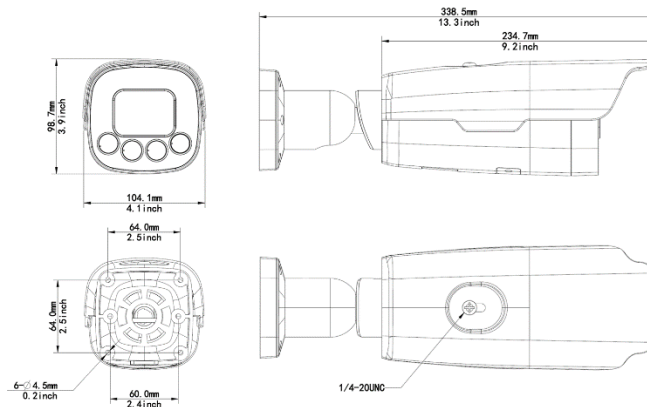
- Provides AC24V/DC12V power supply and supports PoE
- Cast aluminum body, efficient heat dissipation
- IP67, IK10

## Specifications

| HC121                    | TC-08S-Z  |
|--------------------------|---|
| Camera                   | Description   |
| Sensor                   | 1/2.8", 2MP CMOS  |
| Focal length             | 4.7-47 mm, motorized zoom   |
| Shutter                  | Auto/Manual, range: 1/25-1/100000 s   |
| Minimum illumination     | 0.001lux (F1.6)   |
| Image                    | Description   |
| Max resolution           | 1920 x 1080@60fps   |
| Video compression        | H.265, H.264, JPEG  |
| Region of Interest (ROI) | Support   |
| Video OSD                | Supports 8 overlay areas and allows contents including date, time, date+time, custom contents   |
| Photo OSD                | Allows contents including time, license plate number, device ID, camera ID, vehicle body color, whitelist, image authentication ID, custom content (3 items), location                              |
| Smart                    | Description   |
| Application              | Road, entrance & exit (default)   |
| Vehicle detection mode   | Trigger by video (default) or coil  |
| Intelligent recognition  | License plate number, number of characters on plate, vehicle body color (daytime)   |
| List configuration       | Supports whitelist and blacklist configuration, allows import, export, add, and delete operations   |
| Let through policy       | Trigger gate opening by recognized vehicles<br>Trigger gate opening by all vehicles<br>Trigger gate opening by whitelist<br>Trigger gate opening by non-blacklist<br>Configurable boolean output ID |
| Storage                  | Description   |
| Edge storage             | Built-in 8GB eMMC, supports Automatic Network Replenishment (ANR)   |
| Storage expansion        | Supports Micro SD card expansion, up to 256GB.  |
| Structure                | Description   |
| Illuminator              | Built-in integrated illumination module, including 4 white light LEDs, 50m illumination distance, automatic on/off control.   |

|                       |  |
|-----------------------|--|
| Sunshield             | Long sunshield   |
| Bracket               | 3-axis mounting bracket                                      |
| <b>Interface</b>      | <b>Description</b>   |
| Network interface     | 1×10M/100M RJ45 network interface                            |
| Serial port           | 1*RS485  |
| Boolean output        | 1 relay output, withstand voltage: AC 125V/0.3A, DC 30V/1A   |
| Boolean input         | 2 inputs, supports level/boolean, with max level up to DC 5V |
| Audio I/O             | 1/1  |
| Storage interface     | 1*Micro SD card slot   |
| <b>General</b>        | <b>Description</b>   |
| Power supply          | AC24 ± 20% / DC12V + 25% - 10%                               |
|                       | Power consumption: ≤20W                                      |
|                       | Supports PoE(802.3at, class 4)                               |
| Dimensions (L×W×H)    | 338.8mm x 104.1mm x 98.4mm                                   |
| Weight                | 1.65 kg  |
| Operating environment | -40℃~60℃, ≤90% RH  |
| Ingress protection    | IP67, IK10   |

## Dimensions



## Typical Applications

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

## Order Info

| Model | Configuration | Remarks  |
|-------|---------------|--|
| HC121 | TC-08S-Z      | UNV 2MP ANPR Bullet Camera (4.7-47mm, WDR, starlight, PoE, H.265, white light) |

## Recommended Accessories

| Mount         | Bracket | Example | Remarks                                     |
|---------------|---------|---------|---|
| Wall mount    | \       | \       | Use the mount kit delivered with the camera |
| Pendent mount | \       | \       | Use the mount kit delivered with the camera |

|                   |                   |   |                                  |
|-------------------|-------------------|---|----------------------------------|
| <p>Pole mount</p> | <p>TR-UP06-IN</p> |  | <p>Common pole-mount bracket</p> |
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