## AI Camera-Civilized riding-CA-101



CA-101 is an AI camera product designed for shared electric bicycles, designed to be used in conjunction with a central control unit. This terminal is equipped to identify violations such as running red lights, driving in motor vehicle lanes, and riding against traffic. It uploads records of these violations to the central control unit and simultaneously captures images of the infractions, which are then stored in the backend for future evidence purposes. Additionally, this camera supports external fixed-direction cameras and helmet recognition cameras. The fixed-direction camera is used to capture ground parking markings, enabling precise parking functionality. The helmet recognition camera is employed to determine whether riders are wearing helmets, thus facilitating helmet compliance identification.

## Features:

• Red light running identification : supports red light identification.

- Motor vehicle lane driving identification : supports the identification of motor vehicle lane driving.
- Retrograde recognition : supports recognition of retrograde.
- Serial port (485) communication : through the serial port (485) and the sharing of the central control communication, upload illegal information, upload illegal pictures.
- Infrared detection: supports infrared light, the dark environment can work normally.
- Light sensing detection: supports photosensitive detection, automatically open the infrared light in the dark environment.
- Video (photo) storage: memory card 8G (can be selected according to actual requirements), support storage for video and photos.
- Fixed-point directional camera (optional): supports the identification of station parking lines to realize fixed-point parking.
- Helmet recognition camera (optional) identifies whether the helmet is worn.

## **Specifications:**

Tractor parameter	
Size	Length, width and height : $(84\pm0.15)$ mm × $(45\pm0.15)$ mm × $(25.8\pm0.15)$ mm
Input voltage range	Voltage input : 3.7V-5V

Internal battery	Non-rechargeable batteries : 3.0V , 1200mAh
	Traffic light camera: <200 mA @ 4 V
Power dissipation	Fixed-point directional camera: <100 mA @ 4 V
	Helmet recognition camera: <100 mA @ 4 V
Waterproof and	IP67
dustproof	
Working temperature	-20 ℃ ~ +70 ℃
Working humidity	20% ~ 95%
Sheathing material	ABS+PC,V0 fire protection
Bluetooth performance	
Bluetooth version	BLE5.2
Receiving sensitivity	-90dBm
Traffic light camera	
AI slug	Computing power: 0.2 Tops
	Support for a 2M pixel camera
	Support for 1080P resolution
	The H.264 encoding is supported
Camera lens	Field angle: FOV (D diagonal) 91.8 °± 5°, FOV
	(H) 84 °± 3°, and FOV (V) 54 °± 3°
	Focus length: 2.88mm

	Lens size: H=15.56mm	
Image sensor	Pixels: 2 million pixels	
	Resolution: 1080P	
Fixed-point directional camera		
Resolution	720P	
Fill-in light	White fill light	
White fill light	3.7V-5V	
Communication	USB joggle	
Helmet recognition camera		
Resolution	720P	
Fill-in light	White fill light	
White fill light	3.7V-5V	
Communication	USB joggle	