

# Specification

## 3D People Counter

HX-CCD22 ( Night Vision Bus Version)

Version 2025-1.6

### ❖ Product Introduction

The 3D people counter HX-CCD22 (night vision bus version) obtain 3D depth information in real time through binocular stereo vision AI sensors, identify head and shoulders features in complex scenes based on head and shoulder feature algorithms, and achieve accurate passenger flow statistics through human body tracking algorithms.

It can be used in shopping malls, retail stores, public transportation buses, scenic spots, libraries, museums, restaurants, factories, supermarkets, parks, buildings, toilets, etc.

### ❖ Product Features

- ◆ **Real-time and Accurate Statistics:** Real-time and accurate human body recognition with an accuracy rate of up to 98%, accurately filtering out children and other large objects.
- ◆ **Gender Recognition:** Gender recognition can be realized, rich crowd portraits can be generated, and in-depth data analysis can be performed.
- ◆ **Residency Statistics:** Multi-dimensional statistics of the number of people staying in the specified area, accurately recording the length of time people stay.

- ◆ **Passing Statistics:** People who enter the device detection area but do not actually enter the store and leave will be identified as "passing by".
- ◆ **Return Statistics:** People in the store enter the device detection area but do not completely leave the store, and return to the store will be identified as "returning".
- ◆ **Wide Coverage:** The device has a 140° soft zoom and is adaptive to scenes of various heights.
- ◆ **Night Shooting:** It comes with an infrared fill light, and the accuracy in dark environments is not affected.
- ◆ **Timeliness of Data Upload:** The device can customize the time of the device's own data upload passenger flow platform, which can support real-time, 1 minute, 5 minutes, 30 minutes, etc.
- ◆ **Multi-protocol Support:** The device provides HTTP POST/HTTPS POST/FTP/SFTP/Modbus-RTU/ MQTT protocol data transmission and supports secondary development data docking of the device.
- ◆ **Rich Open Interfaces:** Device local open rich application interface, RS-485 extended support, developers can flexibly and quickly integrate development.
- ◆ **Network Intelligent Devices:** Support local computing, no local server, support flash offline storage, support network disconnection, support Poe power supply, support wired/wireless connection.

### Product Features:

1. Bus Mode: Start counting when the door is opened and stop counting when the door is closed.
2. Limited Mode: When the number of people exceeds the set value, the device sends a signal to the alarm and the alarm sounds.
3. Child Mode: After setting the height of the child, people who pass by below the height will be judged as children.
4. Control Mode: The device is matched with the relay to control a variety of electrical appliances.
5. Data Display Mode: The device is matched with the host to visualize the data.
6. Channel Mode: It can detect the number of people passing through the door and the number of people entering the store.
7. Night Vision Mode: The fill light can be turned on actively at night with low brightness.
8. Heat Map Mode: The status of the area where people pass can be displayed according to the heat map.
9. Stand-alone Mode: The local data of the device can be stored for 90 days, and the local data of the device can be exported, and can be used in an environment without network.

## ❖ Product Pictures

### • Product Pictures



Front



Back

### • Product Accessories



Waterproof Cap



Screw



I/O and 485 Connectors



Power Connector



Instructions



Inner Hexagon Spanner



Bracket



Power Adapter

**⚠ If any of the above items are damaged or lost, please contact your supplier in time.**

## ❖ Product Parameters

Product Name	3D People Counter
Product Model	HX-CCD22 (Night Vision Bus Edition)
Function Parameters	
Accuracy	Up to 98%
Lens Field of View	Horizontal 140°, Vertical 115°
Height Range	1.9–3.2m
Coverage Range	Below (1.1-8.24m); Below (1.1-9.8m)

Filter Height	0.5–1.2m
<b>Technical Parameters</b>	
Power	3.2W-7.2W
Power Supply	POE (802.3af/at) / DC-(9V-36V)
Network Cable	CAT5
Networking	Wired network/WI-FI
Addressing	Static IP / DHCP
Offline Cache	90 days
Data Upload Method	HTTP POST/HTTPS POST/FTP/SFTP/Modbus-RTU/ MQTT
Data Expansion Interface/Signal	485 interface x 1 / 6V~24V / IO input x 1
Power Protection	Anti-static, anti-surge, anti-reverse connection
Video Protocol	Support ONVIF, frame rate: 20fps; bit rate: 200kbps
Fill Light	Built-in fill light, irradiation angle 150, power 4W
Baud Rate	300~115200 bps
<b>Work Environment</b>	
Working Temperature	-40°C~55 °C
Working Humidity	20~80 %
Storage Temperature	-20°C~50 °C
Storage Humidity	20~80 %
<b>Package</b>	
Product Specifications (mm)	143 x 70 x 40; Weight (Kg): 0.42/unit
Packing Specifications (mm)	240 x 110 x 95; Weight (Kg): 0.7/unit (including accessories)
Outer Box Specifications (mm)	500 x 500 x 250 (20 units per box); Weight (Kg): 14/box
Installation Method	Ceiling/Suspended/Embedded Installation
<b>Certificate</b>	
Product Related Certificates	CE/FCC/ROHS/IP66 waterproof report/quality inspection report /high and low temperature test report/appearance patent/utility model/MTBF report /BIS certification/shock and vibration test report

## ❖ Regional Coverage

Installation Height (m)	Coverage Width (m)
1.9	1.10
2.0	1.65
2.1	2.20
2.2	2.75
2.3	3.30
2.4	3.85
2.5	4.40
2.6	4.95
2.7	5.49
2.8	6.04
2.9	6.59
3.0 (The bus version supports the highest height)	7.14
3.1	7.69
3.2	8.24

Website	Technical Support	Sales hotline	Online purchase
<a href="http://www.foorir.com">www.foorir.com</a>	<a href="mailto:info@foorir.com">info@foorir.com</a>	+86 18981978865	<a href="http://huaxiniot.en.alibaba.com">huaxiniot.en.alibaba.com</a>

We will publish the upgrade software or drivers of each product on the official website in time, you can get technical support on the [www.foorir.com](http://www.foorir.com), and download the latest version of the latest software or driver for free. Huaxin Zhiyun Technology Co., Ltd. will make every effort to check for errors in printing and pictures, but please understand possible omissions. The appearance, specifications, parameters, prices and product availability of the products listed in this website are subject to change at any time and shall prevail according to the actual situation.