3D People Counter Camera Specification

Model: PC-3D001

1. Product Overview

Binocular passenger flow statistics product is a 3D accurate passenger flow statistics equipment. This product obtains depth information through binocular stereo sensor. Based on head-and-shoulder feature algorithm, the product can identify head-and-shoulder features in complex scenes, so as to achieve accurate passenger flow statistics.

2. Application Scenarios

2.1. Retail

* Customer flow analysis: Count the daily and hourly customer flow of stores to help merchants optimize staffing and operating hours.
* Store digitization: Identify hot spots of customer activities in shopping malls or supermarkets and optimize the display layout of goods.
* Conversion rate calculation: Evaluate the effectiveness of marketing activities by comparing the number of people entering the store with the actual number of purchases.
* Queue management: Real-time monitoring of queues at cash registers or service areas, and timely deployment of personnel.

2. 2 Transportation

* Stations and airports: Monitor the number of people entering and leaving the station, analyze passenger flow peaks, and optimize crowd diversion and facility layout.
* Public transportation: Real-time statistics of the number of passengers in buses and subway cars to improve the efficiency of passenger capacity management.
* Congestion management: Monitor passenger flow in dense places such as stations and docks to avoid excessive crowds.

2.3. Urban management

* Smart city planning: Analyze passenger flow patterns in public places (such as squares, parks, and commercial pedestrian streets) to provide data support for urban planning.
* Event monitoring: Real-time monitoring of traffic in crowded scenes (such as music festivals and exhibitions) to prevent safety accidents.

Traffic signal optimization: Adjust the duration of traffic lights through pedestrian flow data to optimize traffic efficiency.

2.4. Education and office

* Campus management: Count the flow of people in campus entrances, teaching buildings, libraries and other areas to optimize space utilization.
* Corporate office: Monitor the flow of people in office buildings to improve resource management and safety.
* Public safety: Analyze the density of people in large-scale places (such as auditoriums and conference rooms) and formulate evacuation plans.

2.5. Entertainment venues

* Amusement parks and scenic spots: Count the number of daily visitors, predict peak periods, and plan entry restrictions.
* Cinemas and stadiums: Monitor entry and exit traffic to ensure the smooth progress of activities.

* Gaming and clubs: Analyze player distribution and traffic to optimize operating strategies.

2.6. Medical and public services

* Hospital management: Count the flow of people in outpatient halls, pharmacies and waiting areas to optimize processes and resource allocation.

* Public institutions: Such as banks and government halls, monitor the number of people doing business and shorten waiting time.

3. Product Features

3.1 Real-time accurate statistics：

* Real-time accurate recognition of the human body, accuracy of more than 98%；
* Accurately filter children and other large objects；

3.2 Designed for Complex environment：

* The sunny scene on the street；
* Decorative lighting scene；
* Dark/dimly scene ；

3.3 Unaffected by the environment ：

* Designed for floor and wall scenes with various materials/colors；
* The scenes with walls/doors/objects around；

3.4 AI Network Device：

* Local computing is supported without the need for a local server；
* Support offline storage, support off - line continuation；
* Supported to Power supply by POE；
* Supported by WI-FI；

3.5 Plentiful APIs：

* Device enable plenty of APIs；
* Developers can integrate development flexibly and quickly.

3.6 Large Coverage：

* With 100° field of view, covering a wider range.
* Privacy Security
* Base on depth map

4. Performance Parameters

Visual Field	Horizontal 100°， Vertical 70°
Depth Map Output	1280*800@25fps
Function Parameters	
Accuracy	≥98%
Height Range	2.2m~6m
Coverage Range	1.2m~5.5m
Filter Height	0.5m~1.2m
Technical Parameters	
Power	3.2W~3.6W
Power Supply Mode	POE（ 802.3af/at） /DC-12V
Ethernet	UTP/WI-FI

IP Addressing	Statics IP / DHCP
Offline caching	90 Days
DATA UPLOAD Mode	HTTP POST/HTTPS POST
Other DATA Interface	485 x 1/ 6V～24V IO Input x 1
Work Environment	
Work Temperature	0°C~45 °C
Work Humidity	20~80 %
Storage Temperature	-20°C~50 °C
Storage Temperature	20~80 %
Packaging	
Structure（ mm）	143x 70 x 40
Weight (g)	370
Installation	Top Mounting/Lifting

5. Installation Height

Installation Height	Coverage widget
2.2m	1.2m
2.5m	1.9m
3.0m	3.1m
3.5m	4.3m
4m~6m	5.5m