Specification of

Passenger Counter

Catalog

1.Passenger Counter System

1.1 Introduction

This product can be used for buses, subways, trains, ships, shopping malls, and building passages, etc. Capture video images through passenger flow detection cameras, analyze the height, shape and direction of all objects passing through the image, so as to accurately judge the number of people and direction of entry and exit, and generate an entry and exit record.

The passenger counter camera with the infrared light illumination can adapt to the environment with any light, even if in completely black environment. Integrated independent digital I/O port can be connected to other devices or the devices for opening and closing the door. The number of entries in and out can be transmitted in real time via wired network and 3G/4G network. Collecting up and down passenger flow data of each site in real time, and transfer to the passenger flow collection system then transfer to the traffic integrated information platform.

1.2 System structure
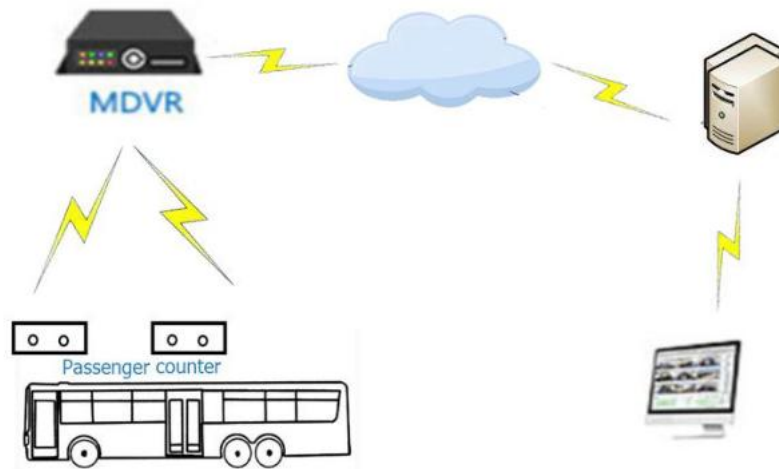
System schematic:
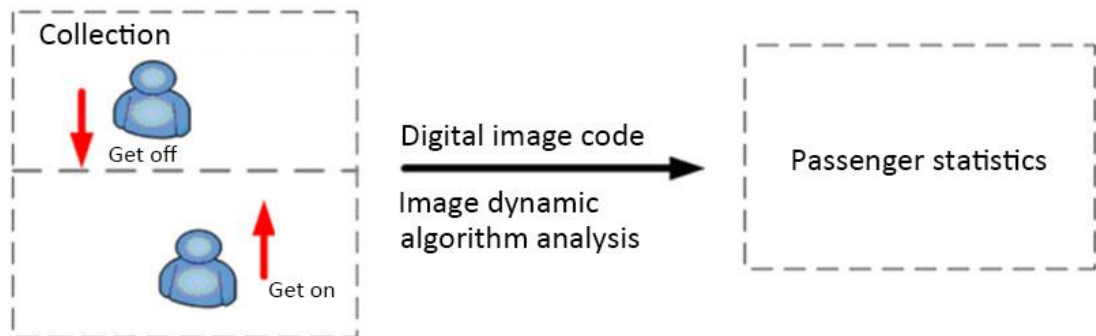
1.3 Features

➢ Strong environmental adaptability,not affected by the two-way, side-by-side, distance of the passengers,different clothing colors, different hair colors, wearing hats and luggage.

➢ 95% up accurate.High accuracy despite crowded group.

- Can accurately adjust the lens angle of the installed video passenger flow collection device.Autofocus, allowing a certain angle tilt with the horizontal direction;
- The passenger counter is triggered by the state of the bus switch door.Counting starts when the door is opened,real-time statistics,and upload data after the door is closed.
- Count all kinds of time-sharing traffic and produce various statistical reports;
- Adjust the brightness automatically and is not affected by external light;
- Easy installation .

1.4 Parameter

Table1 Technical parameters of Main device

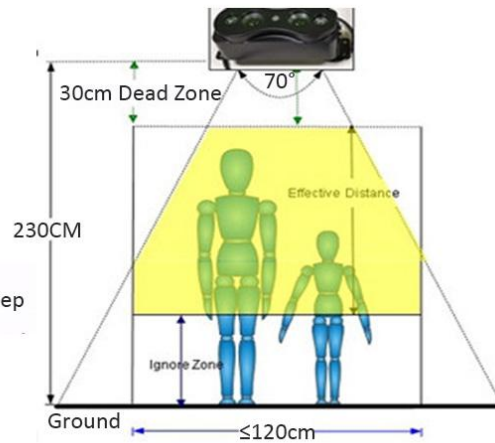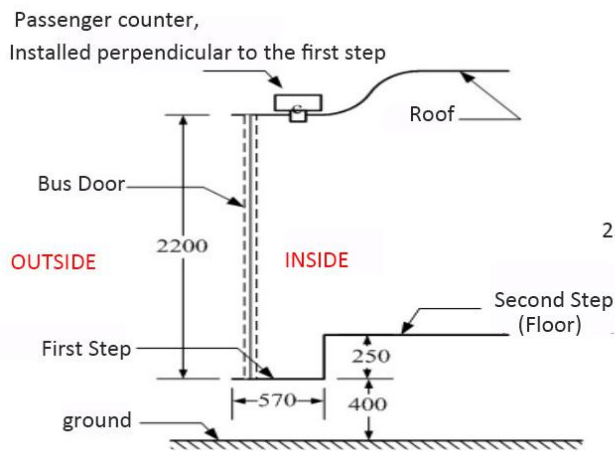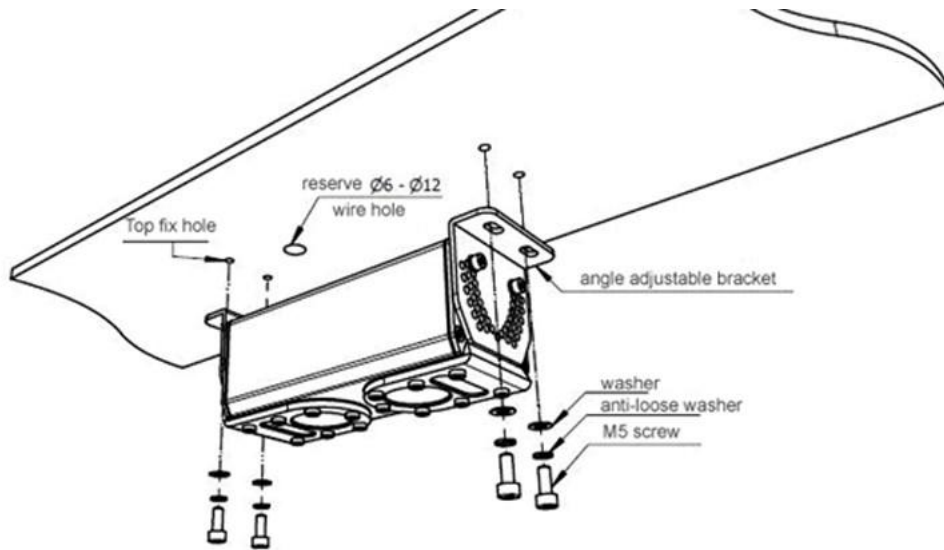| Term	Parameter	Performance
System	Operation Language	Chinese/English
	Operation interface	C/S Operation configuration
	Password security	Two-level management of user password and administrator password
	Accuracy	About 95%
Power input	+9～+36V	9V～36V，Before use, please make sure that the vehicle power supply is within this range
Power output	12V	12V（+/-0.2V）， Maximum current:2A
Video	Video input	4ch video input,support CIF/D1/960H/720PAHD video input
	Video output	1ch video output
	Video display	1~4 Screen display

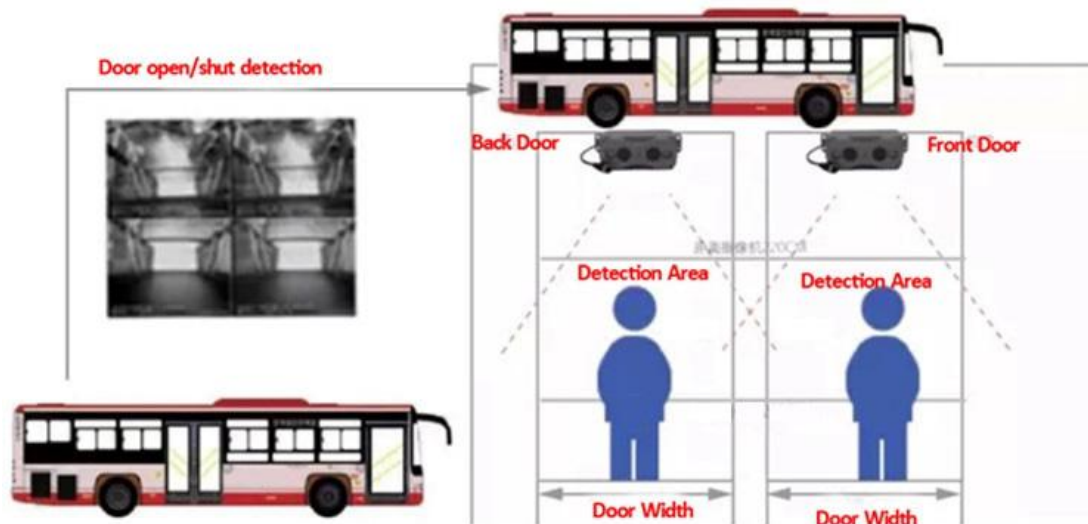|	Video standard	PAL/NTSC
Alarm	Alarm input	4ch alarm input，configurable low level alarm below 1V or high level alarm above 5V
Storage	SD	Support double SD card(256GB)
	RAM	4GB
Communication interface	RS485 interface	Support 1 RS485 interface
	RS232 interface	Support 1 RS232 interface
	RJ45	1 RJ45 interface,can be used to test and backup passenger data（In TXT and EXCEL format）,set parameters, etc.
Wireless communication	3G	Built in 3G(HSDPA/EVDO/TD-CDMA)module （Optional)
	4G	Built in 4G Module (FDD-LTE/TDD-LTE Optional)
	WiFi	Built in WiFi module
Operating temperature	-35℃～70℃	In a well-ventilated environmen
Storage temperature	-40~85℃	In a well-ventilated environment
Malfunction indication	Provide indicator light for easy maintenance.Include： Power instructions,operation instructions, storage instructions, communication instructions,positioning instructions, etc.	
Installation height	1.9~2.6m	
Environmental illuminance	0.001lux(Dark environment)~100klux（Outdoor direct sunlight）,no fill light is required, and the accuracy rate is not affected by	

	environmental illuminance.		
Positioning	Support GPS and BDS，GPS coordinate，GPS speed can write to encoded stream,at the same time can be uploaded wirelessly （Optional）		
Fire protection requirements	The sensor uses non-combustible materials such as metal housing		

Table 2 Technical parameters of passenger detection cameras

Specification	Parameter	Specification	Parameter
Image Sensor	PAL	**Gain**	Automatic gain control
Video standard	700 TV Lines	**S/N**	＞48db
Connector	4Pin Aviation	**Power**	DC12 Voltage input; ≤1W
Horizontal Resolution	700 TV Lines	**Shutter**	1/50-1/80000（s） 1/60-1/80000（s）
Image output	Synchronous sampling output	**Weight**	≤0.6kg
Lens	2.8mm/3.6cm	**Relative humidity**	10%～90%
Lens pixels	648×488 (Choose according to detection range)	**Radiating**	Passive structure cooling
White balance	Automatic white balance	**Dimension**	180×64×55mm （L×W×H）
Video output interface	Composite video output,75Ω 1Vp-p		

1.5 Installation

reserve Ø6 - Ø12 wire hole

Top fix hole

angle adjustable bracket

washer
anti-loose washer
M5 screw

Passenger counter,
Installed perpendicular to the first step

Roof

Bus Door

OUTSIDE   INSIDE

2200

First Step

Second Step
(Floor)

250

570

400

ground

30cm Dead Zone

70°

230CM

Effective Distance

Ignore Zone

Ground   ≤120cm

Door open/shut detection

Back Door

Front Door

Detection Area

Detection Area

Door Width

Door Width

2.CMSV6 Software

View all the data dynamics and videos of any online vehicle in real time

Passenger Detail

Passenger Detail(External)

Sel Time: Custom Time | Start Time:2019-08-30 00:00:00 | End Time:2019-12-30 23:59:59 | Query | EXP File Form

Vehicle: 445910465

Index	Plate No.	Plate Colo	Department	Time	Current Position	The Number	The Number Of Th	Middle Door Numk	Middle Door Numk	Back Door On The	The Number Of Ba	Number Of Passeng	Incre
46	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:09:06	广东省深圳市宝安区工业路26号荣鸿泰工业	29	30	-1	-1			9	
47	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:09:36	广东省深圳市宝安区工业路26号荣鸿泰工业	30	30	-1	-1			10	
48	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:10:01	广东省深圳市宝安区工业路26号荣鸿泰工业	32	30	-1	-1			12	
49	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:10:44	广东省深圳市宝安区工业路26号荣鸿泰工业	32	31	-1	-1			11	
50	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:12:28	广东省深圳市宝安区工业路26号荣鸿泰工业	32	32	-1	-1			10	
51	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:12:29	广东省深圳市宝安区工业路26号荣鸿泰工业	33	32	-1	-1			11	
52	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:12:34	广东省深圳市宝安区工业路26号荣鸿泰工业	33	33	-1	-1			10	
53	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:12:43	广东省深圳市宝安区工业路26号荣鸿泰工业	34	33	-1	-1			11	
54	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:14:04	广东省深圳市宝安区工业路26号荣鸿泰工业	35	33	-1	-1			12	
55	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:14:14	广东省深圳市宝安区工业路26号荣鸿泰工业	35	34	-1	-1			11	
56	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:14:16	广东省深圳市宝安区工业路26号荣鸿泰工业	35	35	-1	-1			10	
57	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:14:42	广东省深圳市宝安区工业路26号荣鸿泰工业	36	35	-1	-1			11	
58	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:14:51	广东省深圳市宝安区工业路26号荣鸿泰工业	36	36	-1	-1			10	
59	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:14:59	广东省深圳市宝安区工业路26号荣鸿泰工业	36	37	-1	-1			9	
60	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:15:40	广东省深圳市宝安区工业路26号荣鸿泰工业	37	37	-1	-1			10	
61	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:15:54	广东省深圳市宝安区工业路26号荣鸿泰工业	38	37	-1	-1			11	
62	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:16:37	广东省深圳市宝安区工业路26号荣鸿泰工业	40	37	-1	-1			13	
63	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:16:46	广东省深圳市宝安区工业路26号荣鸿泰工业	41	37	-1	-1			14	
64	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:16:47	广东省深圳市宝安区工业路26号荣鸿泰工业	41	38	-1	-1			13	
65	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:17:00	广东省深圳市宝安区工业路26号荣鸿泰工业	41	39	-1	-1			12	
66	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:17:05	广东省深圳市宝安区工业路26号荣鸿泰工业	42	39	-1	-1			13	
67	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:17:28	广东省深圳市宝安区工业路26号荣鸿泰工业	43	39	-1	-1			14	
68	445910465	Yellow Car	LSZ-DVR	2019-10-25 16:17:59	广东省深圳市宝安区工业路26号荣鸿泰工业	44	39	-1	-1			15	

- ☑ Index
- ☑ Plate No.
- ☑ Plate Color
- ☑ Department
- ☑ Time
- ☑ Current Position
- ☑ The Number On The Car Door
- ☑ The Number Of The Front Door Off
- ☑ Middle Door Number Up
- ☑ Middle Door Number Down
- ☑ Back Door On The Car Number
- ☑ The Number Of Back Door Off
- ☑ Number Of Passengers
- ☑ Incremental Staff

Above information can be collected

3. Cases

This product can be used for <u>buses, subways, trains, ships, shopping malls, and building passages</u>, etc