Solution Of
Automatic Passenger Counter

1. **Solution Background**

2. Solution

3. Benefits of Solution

Solution Background

Current Problems:

- No accurate number of passenger flow to the bus routes and station, hard to dispatch the buses and optimize the bus route.

- Unable to know the numbers of passenger in the bus, hard to responding to emergencies.

- No passenger counting reports, hard to improve the operation of a company

- Unable to prevent the stealing of ticketing of the driver or the money-keeper.

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System Architecture

BGC-PS002 automatic passenger counter is an intelligent counting device. It is constructed by the cameras and a main controller to collect the information of the passenger's head & shoulder to calculate the number of passengers through our own counting algorithm. Through connecting with MDVR,

 the data could be uploaded to control center in real-time. It is an ideal solution for public transportation companies to dispatch the bus, optimize the travelling plan and scale the

route reasonably.

System Features

NO.	Item	Functions
1	Device Management	The firmware of passenger counter could be upgraded remotely.
2	Real-time Data	The system could display the real-time passenger flow including: 1) the numbers of passengers getting on and getting off the bus of the latest bus stop 2) current numbers of passenger inside the bus.
3	Reports	Passenger flow statistic report
4	*Information Releasing (standby function)	1) Support to send the number of passengers to passenger information display at stop, or mobile app 2) Support the over-loading alarm

Technical Specification

BGC-PS002	Basic Specification	CPU	DSP+dual core processor, 400MHz
		Camera	2*1/3"CCD，2.8mm cameras
		Accuracy	>93%
	Communication Interface	RS485	1 channel
		CAN	1 channel
		Door Signal	2 channels
	Video	Video Input	2 channels, NTSC/PAL
		Video Output	2 channels, CVBS
	Working Voltage		12~36V, typical 12V/24V DC
	Dimension		142.5mm*150mm*41.5mm

Features of Solution

High accuracy

- The accuracy rate is more than 93% compare to other types of counting devices
- Could recognize the different objects and moving track, including the color of clothes, skin, hair and luggage, and the movement of one direction, different direction, crossing and detained of passengers. The speed of recognization is fast enough.

Easy maintenance

- No need to touch the passengers; could calculate the number of passengers through the video analysis technology
- Could be installed in different kind of vehicles, easy installation and maintenance.

Stable and reliable

- Based on Lenz's public transportation solution, the product is more professional, has more features and more stable.
- Compatible with the MDVR to send data, no need to buy an extra SIM card, save the money.

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Benefits of Solution

☐ The bus operating company is able to use the data to arrange the travelling plan and planning the bus route more reasonably, improving the operation level, saving the operation cost.

☐ Through analysis the passenger counting information, the operator could judge whether the bus is overload, whether the driver or money-keeper steals the ticket

☐ The city could use the data to plan the city's traffic routes, improve the traffic jam, and improve the city image.

Successful Cases

Except for the bus, our passenger counter could also be installed in BRT, school bus, coach bus, shopping mall, etc.