DL103

Dual-Lens AI Passenger Counting Camera (Bus Version)



PRODUCT OVERVIEW

The Dual-Lens AI Passenger Counting Camera (Bus Version) uses binocular stereo vision AI sensors to capture real-time 3D depth information. Based on a head-shoulder feature algorithm, it identifies head-shoulder features in complex scenarios and, through human tracking algorithms, achieves accurate counting of passenger boarding and alighting data. With built-in AI algorithms, it supports gender and age recognition, ReID deduplication, and data collection. It is mainly deployed on buses and other transport vehicles, and is also applicable to shopping malls, retail stores, public transportation, scenic spots, libraries, museums, restaurants, factories, supermarkets, industrial parks, office buildings, restrooms, and other venues.

PRODUCT FEATURES

- **Performance**: An intelligent dual-core architecture delivers a 20% improvement in energy efficiency and supports synchronous multimodal data processing.
- **Computing Power**: A 2 TOPS heterogeneous computing engine enables real-time AI inference with millisecond-level response.
- **Storage**: 1GB LPDDR4 intelligent caching technology improves data throughput efficiency by 50%.
- **Built-in AI Algorithms**: Support gender recognition, generate comprehensive crowd profiles, and enable in-depth data analysis.
- **Strong Environmental Adaptability**: Adapts to outdoor scenes with strong sunlight, entrances with decorative lighting, and dim or dark environments.
- **Auto Zoom**: Supports software-based auto zoom; the device supports an installation height range of 1.7 - 3m

and adapts to different installation environments.

· **Wide Coverage**: Covers a range of 1.1–7 m, easily adapting to various venues.

· **Timely Data Upload**: The time for uploading data to the server is customizable, supporting real-time, 1-minute, 5-minute, 30-minute intervals, etc.

· **Multi-protocol Support**: The device transmits data via HTTP POST/HTTPS POST/FTP/SFTP/Modbus-RTU/MQTT protocols, and supports secondary development for data integration.

· **Rich Open Interfaces**: The device provides a rich set of local application interfaces and RS-485 extension support, enabling developers to integrate and develop flexibly and quickly.

· **Smart Networked Device**: Supports local computing without a local server, flash offline storage, breakpoint resume (data retransmission after network disconnection), PoE power supply, and wired/wireless connectivity.

· **Privacy Compliance**: Complies with privacy protection regulations; no facial or other attribute information is extracted, ensuring privacy.

· **High-definition Image and Video Capture**: equipped with a 2-megapixel imaging system to capture high-definition color images and video.

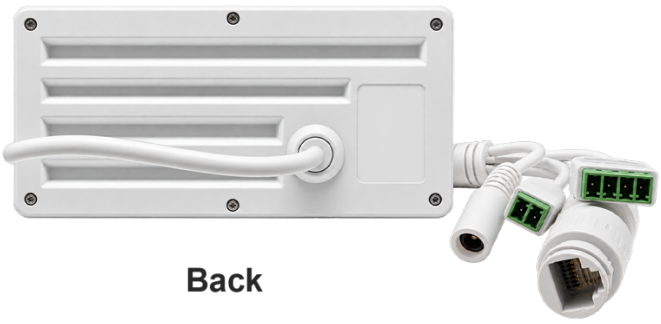
· **Scene Modes**: Wheelchair mode, capacity limit mode, child mode, access control mode, data display mode, lane mode, and standalone mode.

MODEL NUMBER	DL103
Camera Specifications	
Image Sensor	1/3" Progressive Scan CMOS
Image Resolution	1920*1080
Pixel Size	2.7um*2.7um
Image Output Format	RAW RGB
Lens Focal Length	1 mm (Fisheye Lens)
Angle of View	Horizontal 140°, Vertical 120°
Frame Rate	25fps
Functional Specifications	
Counting Accuracy	Up to 99%
Height Range	1.7~3.0m
Coverage Range	1.1~7m
Height Filtering	0.5~1.2m
AI Function Specifications	
Human Attributes	Gender 90% / Age 80% / ReID deduplication 80%
AI Function	Gender/Age/ReID deduplication recognition
AI Function Expansion	On-demand assessment (detection of age, bicycles, wheelchairs, etc.)
Technical Specifications	
Power Rating	2.5~4W(LED close), 3.6~6W(LED open)
Low-light Compensation	Automatic fill light on/off
Addressing	Static IP / DHCP

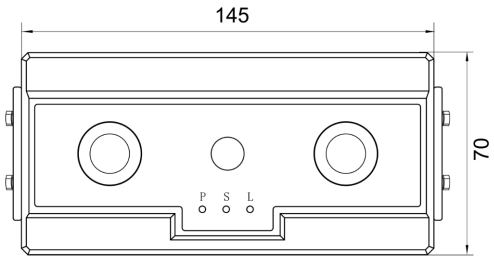
Offline Cache	90 days
Expansion Interface / Signal	RS-485 interface × 1 / 6V–24V IO input × 1 (CAN bus / M12 interface expandable on demand)
Network	Cat5e Cable / 2.4 GHz Wi-Fi
Power Supply Mode	POE (802.3af/at) / DC-(9V-36V)
Data Upload Method	HTTP POST/HTTPS POST/FTP/SFTP/Modbus-RTU/ MQTT
Door Open/Close Signal	Connectable
Operating Environment	
IP Rating	IP66
Operating Temperature	-25°C ~ 75°C
Operating Humidity	20% ~ 80%
Product Dimensions(mm)	145 x 70 x 40
Weight (Kg)	0.42
Mounting Method	Ceiling-Mounted / Suspended / Recessed Mount
Appearance View	

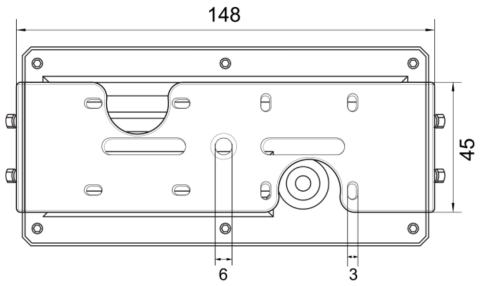


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Back





Recommended Mounting Height (Ceiling-Mounted / Suspended / Recessed Mount)	
Mounting Height (m)	Coverage Width (m)
1.7	1.1
2.1	2.2
2.5	4.4
2.7	5.49
3.0	7.0