



# AI Counting

*AI PVP AI Counting* can quickly and accurately track and determine the number of people/vehicle in the camera's field of view. The system can also detect abnormal behaviors, such as people/vehicle moving in the wrong direction, people falling down or crouching, and people loitering, to immediately send out notifications in real time.

AI  
PVP

# How it works?

**Alguard's AI People & Vehicle Tracking (PVP)** solution, also named AI Counting, can quickly and accurately tracks and determines the number of people/cars in the camera's field of view.

AI Counting can be used in many types of public access areas, such as **transportation hubs, airports, theme parks, national landmarks, entertainment venues, retail shops, tourist attractions, banking, and corporate facilities**. Able to process video data in **real time**, the AI Counting solution is valuable in service management analysis and forecasting for both security and business intelligence purposes.

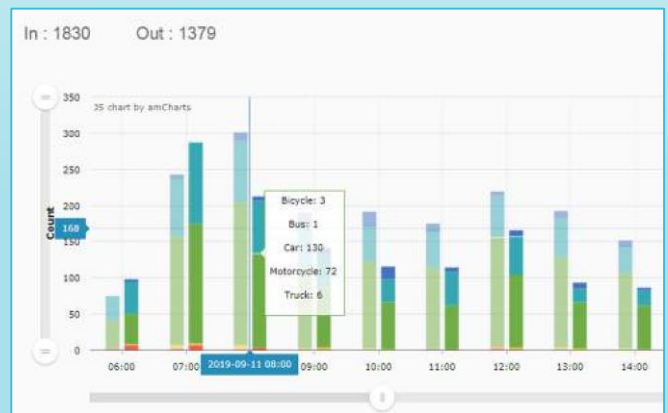
## Business Intelligence



- Count all people entering/exiting an area in real time.
- Provide statistics for business intelligence, including peak hours, traffic flow, number of occupants per unit time, etc.

## People Counting

- Count vehicles approaching/moving away and classify vehicles by type (car, bus, bicycle, etc.) in real time.
- Provide statistics for business intelligence, including peak hours of each vehicle type, traffic flow, etc.



## Vehicle Counting



# AI Abnormality Detection

The subfunctions of AI Counting are to detect **abnormal behaviors**, such as people fall/crouch, people loitering, people/vehicle wrong direction, and illegal parking.

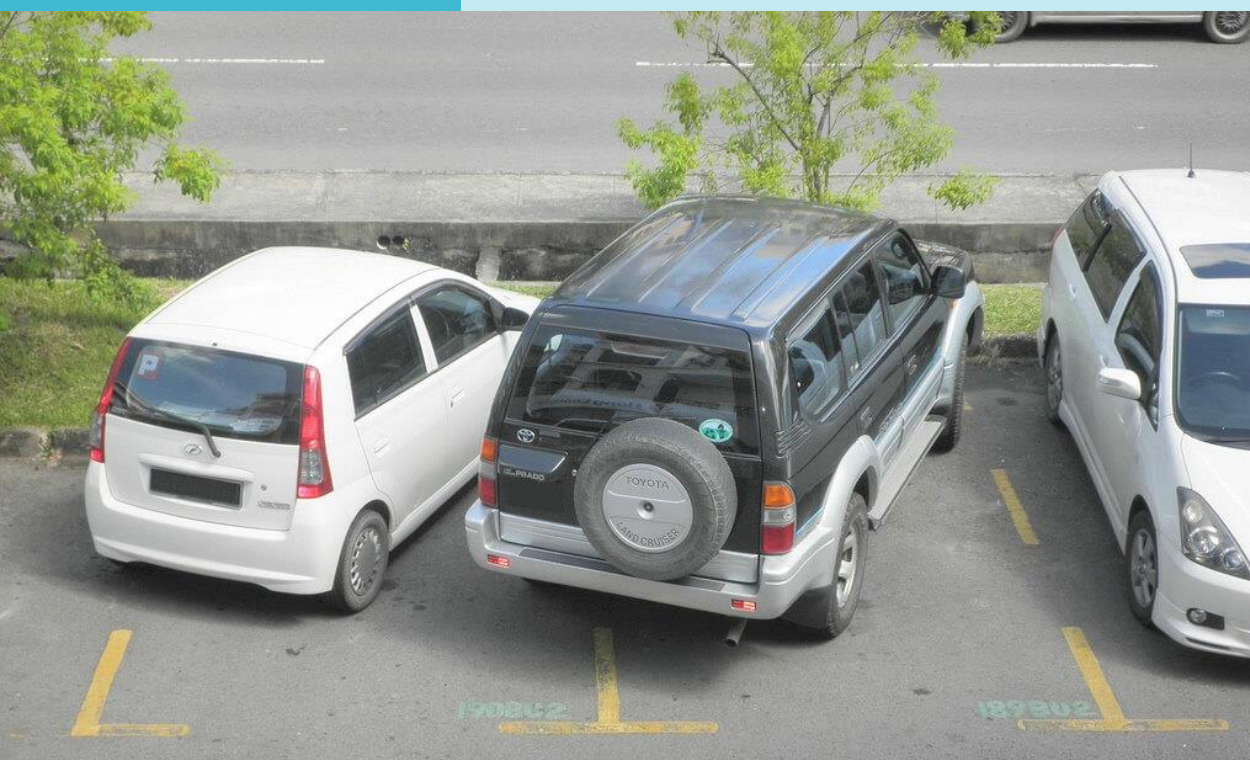


AI Abnormal-Activity Detection (AI AAD) can be used in many types of facilities, including **transportation hubs, retail shops, hospitals and rehabilitation centers**. Able to process video in real time, the AI AAD solution is valuable in service management analysis for employee, customer and patient safety.

People Counting – subfunctions: **Person Wrong Direction, Person Loitering, Person Fall, Person Crouch**

Vehicle Counting – subfunction: **Vehicle Wrong Direction, Illegal Parking**

While setting up the alert rule of each subfunction in AI AAD, the user can receive real-time alert when an event is detected. Abnormality Detection provides timely response, ensure the person's safety, and provide timely notice/warning to ensure the facility security.



# User Benefits

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Measure the number of customers, visitors or passengers to **analyze and understand business traffic patterns**, including peak hours, traffic flow, and occupancy per unit time.

**Monitor traffic** in each direction for various vehicle types and **set alert** for traffic in the wrong direction.

**Enhance security** by detecting in real time any abnormal behavior worthy of concerns, such as people loitering in certain areas, or resolving slip-and-fall claims from customers/staff members in a timely manner.

Compatible with all standard ONVIF IP-based cameras, eliminate the need for high-cost 3D cameras.

Simplify Deployment: no requirement for camera at exactly the entrance to decrease the number of cameras, **easy setup and configuration** that can be remotely accessed and modified as needed without physically changing the equipment.

**Analyze and share statistics or reports** to optimize business operations.





# Use Cases



## Retail Store

Use people counting in retail store to know the flow of customer and get the statistic of peak hour in order to determine the number of staff should be employed at different time period.



## Hospital

While detecting patient fall down or act abnormally, the system will send out the alert immediately. Therefore, the security staff can ensure the person's safety in the real time.



## Public Event

Holding a public event, counting the number of visitor and knowing the peak hour of people/ traffic flow to implement access management. Also get the notification when the abnormal behavior has been detected.



## Traffic Management

Use vehicle counting to detect the flow of vehicle and its peak hour, assisting police department to implement traffic control.

# Hardware Specification



	PVP-100 series		PVP-500 series		
Model series	PVP-110	PVP-130	PVP-510	PVP-530	PVP-550
Number of Channels Supported	PVP Functions (People Counting and Vehicle Counting need separate AI resources)				
	2	4	4	8	16
Form Factor	Mini-PC	Mini-PC	1U	1U	2U
CPU (Intel)	Core i5 Series	Core i7 Series / Xeon E3	Xeon E5	Xeon E5	Dual Xeon E5
AI-GPU	Nvidia High Performance GPU				
Network	Dual Gigabit Ethernet				
Memory (RAM)	8GB	16GB	16GB	32GB	32GB
System HDD	128GB SSD		240GB *2 SSD (RAID 1)		
AI Storage	Include one 1TB HDD		Two 3.5" hot swappable SATA disk bays (Support 1,2,4,6,8TB HDD on RAID 0,1,5,6)		
			Include one 1TB HDD	Include one 1TB HDD	Include one 2TB HDD

Alguard is a global leader in highly-secured cloud video and big data solutions for video surveillance applications. Our products have been successfully deployed by many government, university and corporate enterprise customers. Our solutions deliver unmatched performance, scalability and cost savings. Alguard has world-wide offices and partners in North America (United States and Canada), Central and South America, East and Southeast Asia (Japan, Taiwan, Korea, Thailand, and Singapore), and the Middle East.