



AZS

Counter Supervisor

Monitoring capacity and flows of people

AZS Counter Supervisor is the smart video analysis-based solution that provides the metrics and activity maps needed for counting and monitoring capacity and analysing flows of people.

It allows you to monetise your infrastructure, streamline your allocation of resources, control crowds, better manage your business and meet safety regulations for public establishments and places.

The metrics

¿Why measure?



On Internet (virtual world) **measurement** tools are used to **analyse** visitor behaviour to improve customer performance.

In the **physical world** **physical processes** are often used to measure customer behaviour:

- Surveys.
- Manual counters.
- Estimates, etc.



But the objectives are the same:

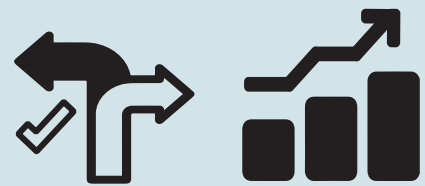
UNDERSTAND CUSTOMER
BEHAVIOUR



STREAMLINE
MANAGEMENT



MAKE BETTER DECISIONS TO
ENHANCE PERFORMANCE



DEFINE

MEASURE

ANALYSE

IMPROVE

CONTROL



Licensed capacity

Capacity is an “administrative” concept that has to do with the award of an operating licence. The capacity is not licensed for a building or facility as a whole, but rather it is specified for each area (room, space, etc.) based on a study of their uses and evacuation conditions.

An establishment’s capacity is calculated in line with the occupation densities set out in the Technical Building Code, specifically in the Fire Safety Basic Document.

Maximum occupancy by activity

Intended use	Area and type of activity	Occupation* (m ² /person)
Administrative	Office floors or areas	10
	General lobbies and public use areas	2
Teaching	Entire floor or building	10
	Premises that are not classrooms, such as laboratories, workshops, gyms, technical drawing rooms, etc.	5
	Classrooms (except in nursery schools)	1,5
	Classrooms in nursery schools and reading rooms in libraries	2
Hospital	Waiting rooms	2
	Wards	15
	Outpatient and diagnostic services	10
	Inpatient treatment areas	20
Commercial	In commercial establishments: sales areas on basement, ground and mezzanine floors	2
	In commercial establishments: sales areas on floors other than the above	3
	In common areas of shopping centres:	
	— Food markets and galleries	2
	— Basement, ground and mezzanine floors or any others with access from the outside	3
	— Floors other than the above	5
	In sales areas where large numbers of people are not expected, such as for display and sale of furniture, vehicles, etc.	5
Public areas	Areas for seated spectators: with seating specified in the design	1 person / seat
	Areas for seated spectators: without seating specified in the design	0,5
	Areas for standing spectators	0,25
	Public areas in nightclubs	0,5
	Public standing areas in bars, cafés, etc.	1
	Public areas in gyms: with equipment	5
	Public areas in gyms: without equipment	1,5
	Multipurpose rooms in conference centres, hotels, etc.	1
	Public areas in fast-food restaurants (e.g. burger bars, pizzerias, etc.)	1,2
	Public seated areas in bars, cafés, restaurants, etc.	1,5
	Waiting rooms, reading rooms in libraries, public use areas in museums, art galleries, fairs and exhibitions, etc.	2
	General lobbies and public use areas on basement, ground and mezzanine floors	2
	Lobbies, changing rooms, dressing rooms and other similar rooms adjacent to auditoriums and meeting rooms	2
	Public areas in transport terminals	10
	Service areas in bars, restaurants, cafés, etc.	10
Stores	Storage and archive areas	40

* When the result of this calculation is decimal, the next highest figure will be used.

R&D about smart video analysis

Technology applied to counting people (entry and exit traffic)

Smart video analysis applied to counting people is an extremely useful tool for any organisation that needs to evaluate foot traffic constantly entering and leaving its premises or wants to control the flow of visitors in passageways.

A 3D depth overhead camera-sensor located off the ground is used to monitor foot traffic (based on detecting heads) crossing under the field of view. The sensor obtains 3D depth images of the scene which are processed to locate and count people crossing a specified line or virtual space and distinguishing between both directions (entering and leaving).

Privacy is guaranteed since no one can be identified with the captured overhead images or recorded. Foot traffic information is only provided in compliance with data protection and privacy legislation.



Technology applied to counting people (passersby)

It measures the traffic of individuals going past an establishment (shop, cafe, bank, etc.) with detection at distances of up to 6 m.

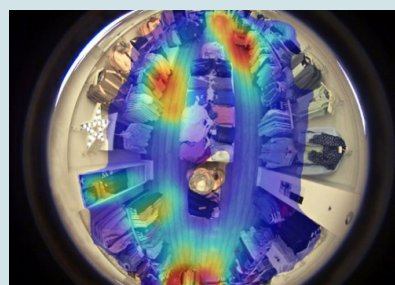
2D micro cameras positioned obliquely at the top of the shop window are used. They process and analyse diffuse images of passersby completely anonymously and only transmit count metadata.



Technology applied to activity detection (heat maps)

Activity heat maps are a technological tool which displays data that can be used to evaluate behaviour.

They provide a graphical representation of the busiest parts of the premises, including bottlenecks and activity flows, through a hierarchy of colours to quickly identify points with most people (hot) and dead zones (cold) by applying video analysis to hemispherical omnidirectional cameras.



AZS Counter Supervisor applications



Museums and exhibitions



Sports and cultural events



Public and private facilities



Shows and leisure venues



Shops and shopping centres

Benefits of using it

✓ Our customers use the AZS Counter Supervisor solution to:

Monitor capacity in buildings in real time with details of entries and exits through external doors.

Plan employees and minimum services.

Manage waiting rooms and control crowds.

Meet safety standards for public establishments and places.

Adjust lighting systems, HVAC and energy use.

Track the flow of people in passageways.

Help make decisions about openings, expansions, closures and remodelling.

Learn about each establishment's potential from passerby traffic.

Measure the success of displays, promotions, shop windows and campaigns.

Evaluate service quality and customer service in real time.

Analyse trends and cost per lead.

Compare KPIs (Key Performance Indicators) between establishments.



AFORO Cafeteria A

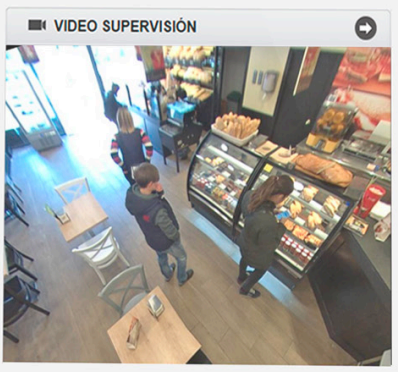
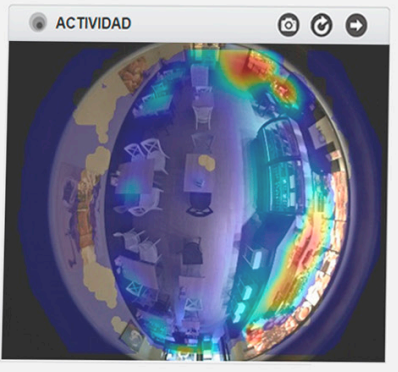
Actual 007

40 58% Máximo: 70

Transeúntes **6.521** Visitas **1.063** Pico **48** Estancia media **10,37'**

ESTANCIAS

Estancia	Ocupación	Aforo actual	Entrada	Salida	Aforo máximo
Planta baja	82%	2.630	17.320	14.690	3.200
Planta primera	38%	684	6.156	5.472	1.800
Cafeteria A	58%	40	1.063	1.023	70
Cafeteria B	92%	110	980	870	120



AZS Counter Supervisor Solution

- **AZS Counter Supervisor** provides simple, easy-to-use scorecards that can be effortlessly understood by users of the solution. Access is via a local website or remotely in the cloud from any device (PC, smartphone, tablet, etc.) by hierarchical access and in real time.
- **AZS Counter Supervisor** allows consultation of business activity statistical data by parameters and key indicators. You can access up to two years' history by ¼ hour, ½ hour, 1 hour, day, week or month detail and correlation with temperature and weather.
- **AZS Counter Supervisor** helps to characterise customer behaviour. Strategic placement of sensors and cameras in the system and the use of smart video, image and data analysis technology enable you to evaluate the activity of employers and consumers.

AZINSOL technology solutions will help you gain a global vision of your business, streamline your management and make the best decisions to maximise your performance.



What you don't measure and observe you can't control and therefore can't improve.



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