URBAN SECURITY

SELEA cameras compared to from other brands.

We are **often** asked to send a **comparison table** highlighting the technical differences between **SELEA cameras** and those of **other brands** on the market.

And there is a reason.

Even the most experienced people in the field of licence plate reading **have difficulty** understanding the real differences between one product and another, on the basis of the technical characteristics described in the products datasheets.

The only way to understand the difference between a product of one brand and another is to **compare the real images** on the road and the related vehicle recognition **data** *(number plate, make, model, colour etc.)* in **critical conditions** - *such as* dirty, deteriorated, half-covered number plates, etc. - **especially at night.**

COMPARATIVE NOTES

We believe it is nor serious and professional to draw up comparative tables, built ad hoc and in one's favor. We prefer to provide documentary evidence with **objective technical data** and with **the pros and cons of** one or the other technology used to create the product: elements that better express the reason for our choices.

SINGLE OR DUAL LENS CAMERA

Using **two sensors** *(and the related optics)* to manifacture a number plate reading camera is certainly more laborious and expensive, but it is the best solution to **guarantee** high performance in terms of vehicle recognition **accuracy** ***(number plate***, ***make, model, colour, type, nationality***, etc.). Dual optics cameras use two separate sensors and each of them performs independent (although synchronised) video processing on the vehicle being filmed. The OCR sensor is a specialised sensor focused on the vehicle licence plate body in order to ensure the best possible recognition of the characters on licence plate. The context sensor, on the other hand, is a colour sensor with a lens suitable for a wider view and is used for video analysis and recognition of ***colour, make and model, and vehicle type.***

Single **lens** (single sensor) cameras are obviously cheaper to manufacture, but they are not able to offer the same guarantee of accuracy in vehicle recognition as dual lens cameras, as they are forced to take the information from the same frame and also only implement the Dual Shutter mode.

DUAL SHUTTER MODE

If **only one sensor** is used, it is *necessary to* implement the Dual **Shutter** mode, i.e. carrying out a double acquisition. The first acquisition (short shutter time) is for the OCR reading of the licence plate and the second one (longer shutter times) is for the acquisition of a colour image to be used as a context image. This mode generates two images with different shutter times but forces **the same field of view** for both (due to the presence of a single sensor and a single lens). The image obtained with longer shutter times (to increase brightness), however, causes the **creeping effect of night images**, as can be seen from the images on the next page. The creeping effect leads to serious errors in vehicle recognition such as colour, make, model and type, especially at night.

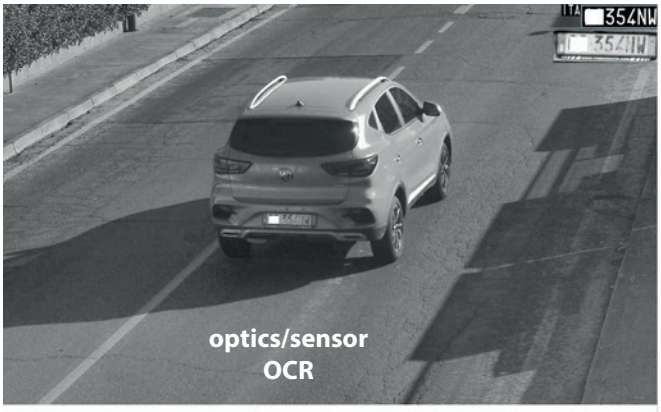
On **the contrary,** those who, like SELEA, use a **dual sensor with dual optics** have the great **advantage of** acquiring context images with a much wider effective field of view, without creeping effect and separately. They implement perform a ***triple acquisition*** **(Triple Shutter**) from the OCR sensor in order to use the best image among the three, to perform the best possible recognition of the characters on licence plate, **thus greatly increasing reading accuracy**.

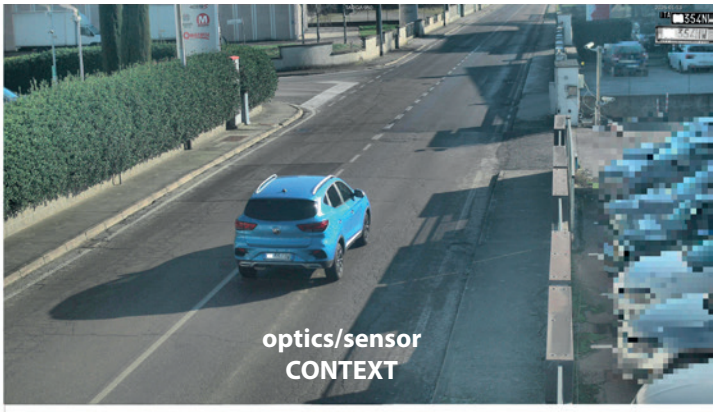
COMPARING CAMERAS

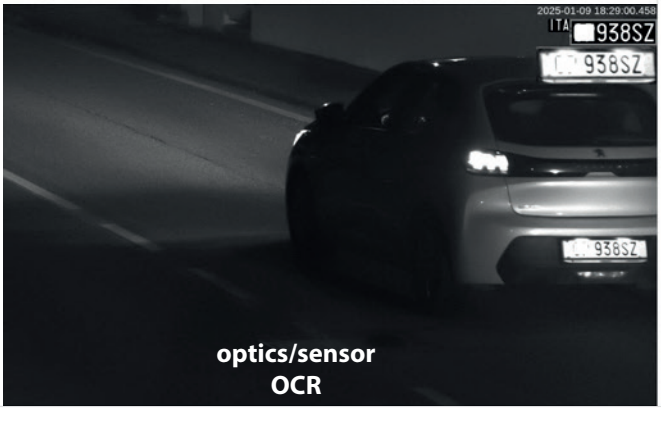
DUAL SHUTTER - Single sensor

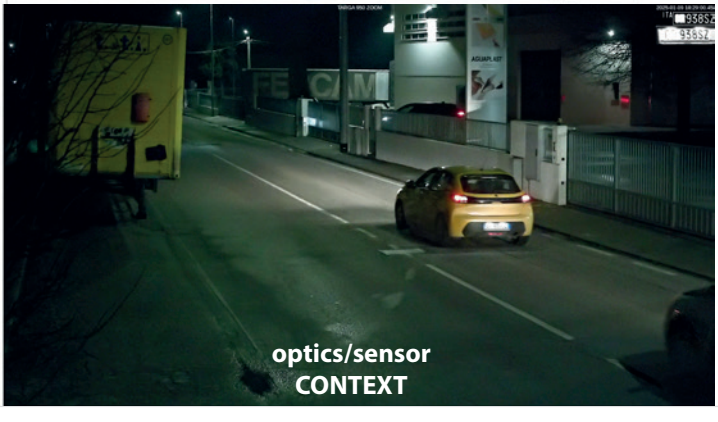
TRIPLE SHUTTER - Double sensor

SELEA









CRITICAL CONDITIONS

It is easy to read clean number plates in summer in broad daylight. It is much more difficult **at night**, especially **in winter** when the plates are dirty and in complete darkness. The matter becomes more complicated if the plates are also deteriorated, deformed or half-hidden. it is precisely when faced with such ***critical conditions*** that the real ***differences between one brand of camera and another*** become clear and evident.

Too bad that **THEFTS, ROBBERIES, ACCIDENTS** (with running away) and **MURDERS** **have no timetable, no season.**

People always forget that licence plate reading systems store **millions of** licence plate **data** per month. A mountain of **useless and misleading data** if non-existent or incorrect. Very useful instead, if accurate, for investigation and crime prevention and suppression, as well as for road safety.
And it is not very reassuring to investigate unread or incorrect number plates for those in charge of security.

That is why for us PRECISION IS EVERYTHING.
Otherwise, what is the point of reading licence plates?

WE WANT TO PROVE IT TO YOU,

through images that are worth more than 1000 words.

Some characters have been hidden for privacy reasons. We assure that they have been correctly recognised. We have also included number plates of different nationalities to show that critical number plates exist not only in Italy.

DIRTY PLATE

DIRTY PLATE

DIRTY PLATE

DIRTY PLATE

DIRTY PLATE

DETERIORATED NUMBER PLATE

DETERIORATED NUMBER PLATE

DETERIORATED NUMBER PLATE

DETERIORATED NUMBER PLATE

PARTIALLY COVERED PLATE

PARTIALLY COVERED PLATE

ANGULAR PLATE

ANGULAR PLATE

ANGULAR PLATE

ANGULAR PLATE

DEFORMED AND DIRTY NUMBER PLATE

DEFORMED, DETERIORATED AND DIRTY NUMBER PLATE

About us

Selea is a manufacturer specialising in licence plate reading solutions, both for vehicle ***access control*** and for ***territorial security*** and ***road control***. Each product is fully developed and manufactured by Selea in Italy, which means that the customer benefits from comprehensive and ongoing technical support.

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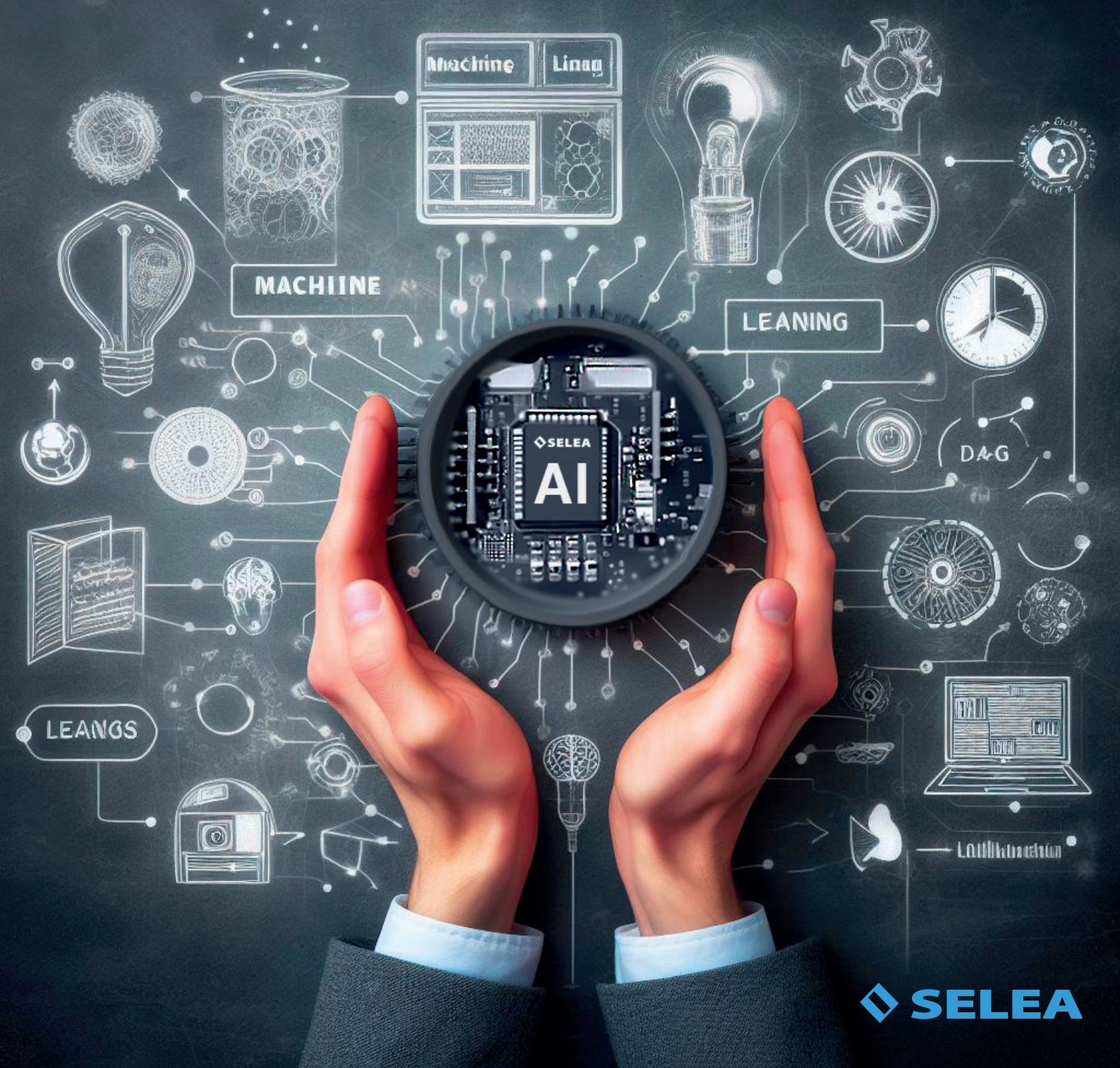
- **CAMERA** PRODUCTION
- **SOFTWARE** DEVELOPMENT
- INTERNAL RESEARCH & DEVELOPMENT
- 100% MADE IN SELEA

madeinitaly



SELEA