SELEA
SMART PARKING

EN

ACCESS CONTROL

TARGA 760

Access Control
LPR CAMERA

CERTIFIED
Privacy by Design
and Privacy by Default
ISDP 10003

NDAA
compliant

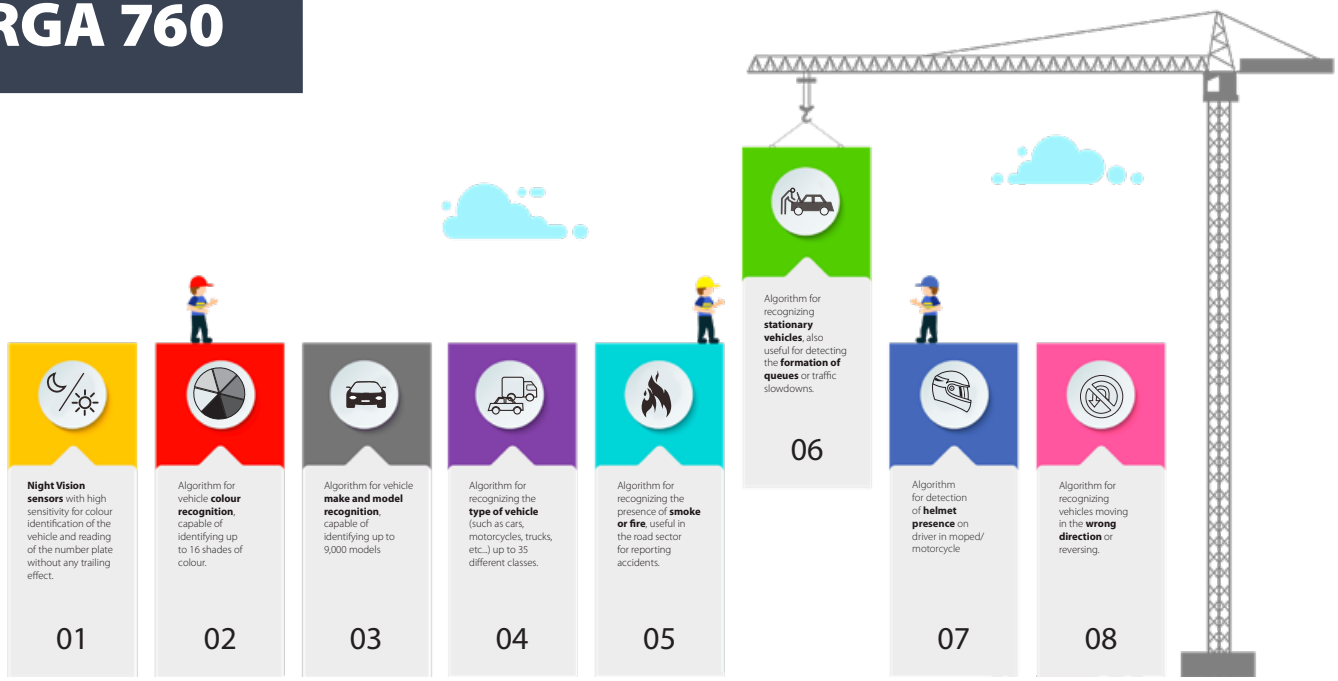
99,8%
the number plate reading accuracy

14
algorithms that can be integrated on board camera

2
the built-in sensors OCR+ context

License plate reading camera (ANPR-OCR) for access control of long vehicles or widened gates (7m) with integrated video analysis..

TARGA 760



Customize and make your camera unique

DATA ACCURACY

Incorrect data always causes a considerable waste of time and risky misunderstandings in investigations. Data ***accuracy*** is the ***true value*** of a video surveillance solution. Selea products are recognized for their high performance and reliability.

DOUBLE LENS: DOUBLE PERFORMANCE

A single sensor – capable of reading number plates and context - saves money. However, when using two separate and specialized sensors, the performance in reading accuracy and video analysis for vehicle recognition doubles both in terms of quality and quantity.

BRIGHT AND SHARP IMAGES EVEN AT NIGHT

Thanks to Selea's special ***Night Vision*** colour sensor, the images of moving objects become incredibly sharp, to the point that the vehicle's licence plate number can be read with the naked eye, thus eliminating the typical night-time trailing effect of surveillance

FOG-FIGHTER NIGHT & DAY

Selea cameras are equipped with the special ***FogFighter*** function to read and recognize licence plates when there is dense fog, both day and night.

CERTIFICATIONS & SECURITY

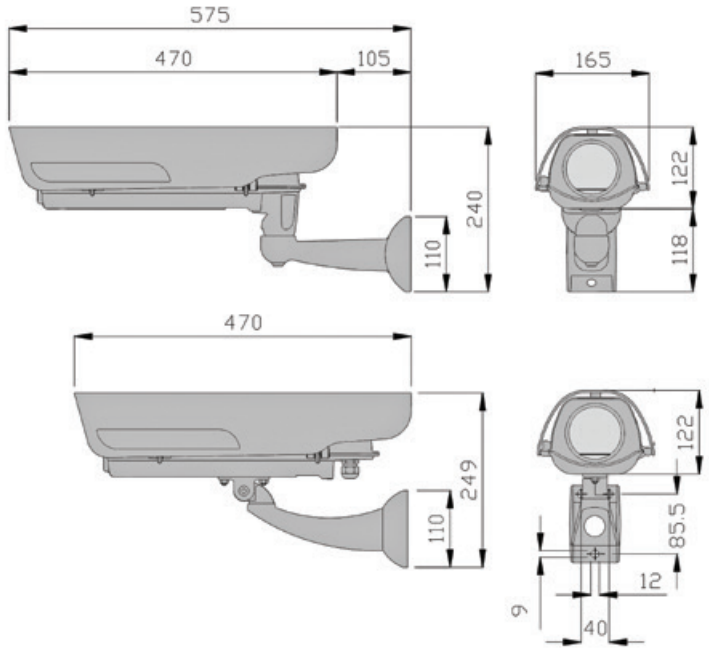
Both the software and the camera are ISDP10003 certified - *Privacy by design and Privacy by default*, which guarantees the attention that has been placed on GDPR regulations and data protection. The cameras are also NDAA compliant - Cyber Security.

HARDWARE FEATURES OF THE CAMERA

Sensor	
OCR sensor	3,2 Megapixel, Global Shutter, CMOS B/N, frame rate of 60 Fps
Context sensor	2 Megapixel color Night Vision CMOS with high sensitivity
Lens	
OCR lens	12 ~ 40 mm varifocal lens with F1.4 and C/CS mount.
Context lens	8 mm or 12 mm fixed lens with IR filter for panoramic view.
IR Illuminator	
Pulsed light IR Illuminator	n.12 high power 820 nm/47° IR LEDs (940 nm on request) that are compliant with the EN62471:2008 standard on photobiological safety.
Internal memory	
Typology and expandability	• ***built-in*** -> 16 GB High Endurance (-40° ~ + 85°C) industrial microSD SLC memory card (expandable on request up to 256 GB of MLC type). • The memory can be expanded using the USB interface provided to connect storage disks of high capacity currently available on the market (≤ 1TB - optional)
Input/Output	
Input	• n.2 digital inputs • interface for PM2,5/10 Air Quality sensors (model AVPM10/25 or similar) *Image acquisition and processing can also be activated by a digital command or through a network connection.*
Output	• n.1 RS232 - RS485 interface • n.1 10mA 5-12 Vdc opto-isolated output • n.1 0.3A - 125 Vac, 1A 30 Vdc volt-free contact relays
Ports	
USB	n.2 USB 3.1 ports
Ethernet	10/100/1000 Mbps LAN
Power supply	
Power supplies	• 230 Vac power supply • 24 Vdc on request or POE+ (option T)
Absorbed power	18 Watt max
Inbuilt protection	
The camera is protected against:	• reverse polarity. • voltage fluctuations greater than 30 Vdc. • overloads with thermal protection. • overvoltages (TVS) on USB and Ethernet ports.

HARDWARE FEATURES OF THE CAMERA

Certifications	
OCR	• ***100% accuracy*** according to UNI 10772:2016 class A parameters for rear, two-line, motorcycle and moped number plates.
Data security	• ISDP10003:2018 - *Privacy by Default & Privacy by Design*
Standards	
Respected standards	• EN62471 • EN55032 • EN55035 • EN61000 • EN62368-1 • EN60529 • EN60068 • EN60721 • European standard RoHS2 - 2011/65/UE
General	
Operating temperature	From -40°C to +65 °C without the need of fans or heaters.
Protection rating	Standard IP66 (on request IP67 and IK10)
Dimension (mm)	L=165 : H=122; D=470
Weight	3 Kg



SOFTWARE FEATURES OF THE CAMERA

Embedded algorithms	
Standard built-in functions	• License plate reading (OCR) - reading characters of over 50 countries • ADR dangerous goods tables reading (Kemler/ONU) • Fog-Fighter (reading license plates in the fog) • Speed estimation • Direction of travel • Nationality (**+ 50 Countries**)
Optional algorithms	
Functionalities that can be integrated into the camera, even at a later time	• Make (**400**) - *accuracy > 95%* • Model (**+9000**) - *accuracy > 95%* • Colour (**16 classes**) - *accuracy > 95%* • Class (**35 classes**) - *accuracy > 95%* • Wrong way transit detection - *accuracy > 95%* • Smoke/fire detection - *accuracy > 90%* • Stationary vehicle detection - *accuracy > 95%* • Helmet presence detection on moped/motorcycle drivers - *accuracy > 95%*
Accuracy	Class, colour, make and model recognition accuracy is affected by installation and outdoor light conditions, and can reach up to 95% of accuracy if manufacturer guidelines are strictly followed.
Data communications	
Integrated webserver	• Onvif communication protocol. • Save data directly to local server or remote NAS. • Integration with third party VMS software solutions. • Synchronized recording of metadata, number plate/Kemler table and context image. • Context images synchronised with number plate/Kemler table. • Dynamic creation and updating of multiple lists (black/white). • Integration and HTTP storage of JPEG snapshot images of external TCP/IP context cameras of any make or model. • Multiple action alarm management. • Differentiated alarms for each type of infringement. • Alarm-triggered transmission of the image associated with the captured number plate to remote devices (such as MOTOROLA and HYTERA mobile radio communication equipment, Tablet etc.) with vocal reception of the number plate. • Double (triple on request) FTP and/or TCP/IP server.
Protocols	TCP/IP, UDP, HTTP, HTTPS, FTP, FTPS, RTP/RTSP, DHCP.
Other integrated protocols	MODBUS
Data security	
Data protection	• HTTPS encryption. • FTPS (FTP over TLS/SSL) encryption. • Micro SD memory encryption. • Automatic deletion of data and images after specified period of time (privacy management). • AES256 Advanced Encryption Standard. • SHA2 Secure Hash Algorithm 2.

SOFTWARE FEATURES OF THE CAMERA

Functionality	
Operating system	• Linux Embedded
Standard built-in functions	• Embedded FPGA video signal processing. • Double FTP server and double IP notification server. • Dynamic FTP notification forwarding customization. • IP notification customization. • Multiple user management using HTTPS protocol protected access credentials for accessing the camera. • List management (white/black, no list) with independent actions for each list. • Synchronized recording of metadata and captured code/number plate image. • Integration and saving of context camera images. • Privacy management with automatic deletion of image data after a specified period of time. • Integration with third party VMS video surveillance software solutions. • Save data on a local server or remote NAS. • HTTPS security management. • FTPS (FTP over TLS/SSL) security management. • E-mail forwarding security using TLS/SSL protocol. • Multiple action alarm management. • Live and check control function for checking the operation of the entire system. • Synchronization of date and time via NTP, IEEE1588 protocol. • Possibility of updating firmware from a web page.
Video output	
OCR sensor	3,2 Megapixel Jpeg images and HD RTP/RTSP video stream with MPEG4,H264 and H265 encoding.
Context sensor	Images and RTP/RTSP or HTTP video stream with MPEG4, H264 and H265 encoding.
Context frame rate	30 fps with 2 Mpx Night Vision context sensor
Accuracy	
OCR accuracy	• Up to 99,8% of transits. • Up to 98% of oncoming ADR plate (Kemler-UN) reading transits, ***100% accuracy*** according to UNI 10772:2016 class A parameters for rear, two-line, motorcycle and moped number plates. • 200 Km/h maximum capture speed

OPTIONAL & ACCESSORI

J-MEM	Algorithm for MAKE AND MODEL detection *(400 makes and 9000 models)*
J-COLOR	Algorithm for COLOUR recognition (*16 shades*)
J-CLASS	Algorithm for VEHICLE TYPE recognition (*35 types*)
J-INC	Algorithm for STATIONARY VEHICLE, WRONG WAY, FIRE/SMOKE detection
J-HELMET	Algorithm for detection of helmet presence on moped/motorcycle drivers
B	Power converter (10 to 32 Vcc)
T	High power PoE+ power injector

ACCESS CONTROL
Software solution

QENTRY

A software solution for those who need a valid tool to manage their customers' parking spaces, such as hotels, campsites, residences, car parks and also private homes, with management functions including:

- permits,
- schedules,
- special types of customers (VIP),
- calculating stay costs,
- entrance of vehicles of a family group, in order to manage the limited availability of parking spaces in residential complexes or campsites. Upon reaching the maximum number of places available, Qentry inhibits entry to additional vehicles of the family group, enabling entry only when the assigned place has been freed.

Qentry is capable of handling special categories of vehicles (ambulances, Law Enforcement, suppliers or special customers, which can automatically enter, regardless of the set time conditions. Qentry is an access control and parking management module and can also be used as a video recording and surveillance system.

About us

SELEA is specialized in the manufacture of number plate reading solutions, both for vehicle access control and for territorial security and traffic control. All of our products are developed and manufactured entirely in Italy. This means that our customers benefit from continuous and comprehensive technical support.

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