

automatic parking, shopping centres, airports,

trade fairs and company entrances.

PAM Software solution





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 parking spaces available, PAM inhibits entry to additional vehicles of the family group, enabling entry only when the assigned place has been freed.

PAM 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. PAM is an access control and parking management module and can also be used as a video recording and surveillance system.

TARGA512 can be integrated into the most well-known parking and access control systems such as:

HUB F44C Honeywell SIEMENS SKIDATA



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.



HARDWARE FEATURES OF THE CAMERA

Sensor					
OCR sensor	2 Megapixel, Global Shutter, CMOS B/N, frame rate of 54 Fps				
Lens					
OCR lens with C/CS mount	 8 mm fixed focus lens for reading distances between 1,5 and 4 mt 16 mm fixed focus lens for reading distances between 3 and 8 mt 				
Illuminator					
Pulsed light IR Illuminator	n.6 high power 820 nm/47° IR LEDs that are compliant with the EN62471:2008 standard on photobiological safety.				
Internal memory					
Туре	8 GB High Endurance (-40° \sim + 85°C) industrial microSD SLC memory card, useful for storing White/Black lists and the captured images.				
Accuracy					
OCR accuracy	up to 99.9% on number plate reading with the vehicle stationary for a standard installation of up to PAN \leq 30°; TILT \leq 25°; H=1.5m max.				
Input/Output					
Input	• n.2 digital inputs Image acquisition and processing can also be activated by a digital command or through a network connection.				
Output	 n.1 optional interface RS232 - RS485 (option W and O) n.1 10A - 250 Vac, o 5 A a 30 Vdc volt-free contact relays (0.3 A a 125 Vac o 1 A a 30 Vdc if the camera is fitted with the Wiegand interface) 				
Ports					
Ports	10/100 Mbps Ethernet LANn.4 USB ports				
Power supply					
Power supplies	12 Vdc power supply				
Absorbed power	10 Watt max				
Inbuilt protections					
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

Standards					
Respected standards	 EN62471 EN55032 EN55035 EN61000 EN62368-1 EN60529 EN60068 EN60721 European standard RoHS2 - 2011/65/UE 				
General					
Operating temperature	From -30°C to +55 °C without the need of fans or heaters.				
Protection rating	IP66				
Dimension (mm)	L=83: H=130; D=310				
Weight	2,7 Kg				



SOFTWARE FEATURES OF THE CAMERA

Embedded algorithms							
Standard built-in functions	 License plate reading (OCR) - reading characters of over 50 countries Fog-Fighter (reading license plates in the fog) Dirt elimination Predictive character analysis Angle compensation Magic spot 						
Data communication							
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 and captured number plate image. Dynamic creation and updating of multiple lists (black/white). Integration and saving in memory of Jpg snapshot images in Http. Privacy management with automatic deletion of image data after a specified period of time. Internal memory management. When the memory is full, the cameras automatically delete the oldest files to make room for the new ones (Fi.Fo method). Multiple action alarm management. 						
Protocols	TCP/IP, UDP, HTTP, HTTPS, FTP, FTPS, RTP/RTSP, DHCP.						
Other integrated protocols	MODBUS (built-in)Wiegand, OSDP (optional)						
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. 						
Video output							
OCR sensor	2 Megapixel Jpeg images and RTP/RTSP video stream with MPEG4 e H264 encoding.						



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 list, no list) with independent actions for each list. Synchronized recording of metadata and captured code/number plate image. 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 the web page. 					

Compatibility and integration

The camera can be integrated into the access control systems of the most famous brands in the parking and access control market such as:







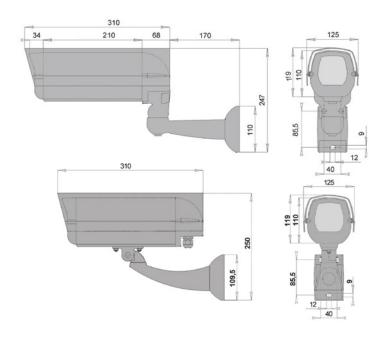




ACCESSORIES

W	Wiegand serial interface for the integration within many access control systems.
0	RS485 interface with standard OSDP communication protocol for the integration with long distance access control solutions.







COMPARISON TABLE OF SELEA ANPR CAMERAS								
Legend ✓ = included (built-in)	iZero			TARGA	TARGA			
= optional (on request) empty space = unavailable	BOX Full	COLUMN Entry/8	COLUMN Full/8	512	504			
Built-in OCR sensor	~	~	~	V	V			
Standard OCR lens Focus (FF=fixed focus; VF=varifocal) - Mount type	12 mm FF-CS	3,6/8 mm FF-CS	3,6/8 mm FF-CS	8/16 mm FF-CS	5~55 mm VF-CS			
Average reading distance (min - max) NB: distances vary considerably depending on both the size of the plates and the positioning of the camera (front or side)	2,5~6mt	1,2~3,5mt/ 1,5~4mt	1,2~3,5mt/ 1,5~4mt	1,5~4mt/ 3~8mt	3~10mt			
Additional context sensor					•			
MicroSD memory for backup and white list	V		V	V	V			
Memory expansion ports for up to 1 TB				V	V			
RS232-485 interface	V		~	V	V			
Wiegand interface	~		~		•			
OSDP interface (Siemens)								
POE+ 802.3at power supply	V		V		•			
230 Vac power supply		•	•		V			
12 Vdc power supply	V	V	V	V				



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WHERE TO BUY

Selea has a network of authorised Distributors throughout the country with whom it establishes design and market

SUPPORT

We provide both a pre-sales and an after-sales technical support service to customers.

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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.

The experience accumulated in over 10 years of collaboration with various law enforcement agencies on video surveillance and license plate reading systems, give us today the opportunity to offer solutions capable of guaranteeing excellent results, and advanced tools for the repression and prevention of crimes (search for accomplices, stolen vehicles, vehicles without insurance/roadworthiness certificate, traffic analysis, and much more). These products can be part of an integrated urban security system, allowing the sharing of information between law enforcement and smart cities.

- HARDWARE MANUFACTURING
- SOFTWARE DEVELOPMENT
- IN-HOUSE RESEARCH & DEVELOPMENT
- 100% MADE in ITALY by SELEA

