

iZERO 2

Parking and vehicle access control solution.



2.3 Mpx
Global Shutter



NVIDIA
Platform



8 GB
Memory



I/O
Serial



POE
802.3af



**SINGLE
LANE**

CERTIFIED
ISDP10003
Privacy by design

COMPLIANCE
NDAA
Cyber Security

WARRANTY
5 YEARS

A modern and elegant ANPR *COLUMN* for **high accuracy** OCR number plate recognition even in critical conditions such as dirty and deteriorated number plates, during the day and night. License plate reading solution for those who want to create a professional, low-speed vehicle parking and access control system with ZERO effect: zero errors, zero problems, zero waste of time.

The camera is equipped with:

- 2.3 Mpx OCR Global Shutter sensor, with a 6 mm fixed focus lens
- IR illuminator for readings from 1.5 up to 6 m
- RS232/485 serial interface, OSDP and non-opto-isolated Wiegand as standard
- Input and Output
- 8GB internal memory for White/Black list making it a stand-alone system without PC connections
- base with adjustment slots for column orientation

The camera can be powered by 12 Vdc or 802.3af **POE**

COMPATIBLE WITH THIRD PARTY SYSTEMS: *Siemens, Faac, Skidata, HUB Parking Came, Fadini ... and many others*

HARDWARE FEATURES OF THE CAMERA

Sensor	
OCR sensor	2.3 Megapixel, Global Shutter 1/2.6", CMOS B/N, frame rate of 60 Fps
Lens	
OCR lens	6 mm fixed focus lens with F1.2 and M12 mount.
Exposure mode	
OCR sensor	Dual Shutter, Triple Shutter, Auto Shutter, Fixed Shutter
IR Illuminator	
Pulsed light IR Illuminator	n.3 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	<ul style="list-style-type: none"> built-in -> 8 GB High Endurance (transfer rate: 80 MB/s) (-40° ~ + 85°C) industrial microSD SLC memory card (expandable on request up to 256 GB of MLC type).
Input/Output	
Input	<ul style="list-style-type: none"> n.1 digital input n.1 volt-free contact input
Output	<ul style="list-style-type: none"> n.1 RS232 - RS485 interface n.1 digital output n.1 0.3A - 125 Vac, 1A 30 Vdc volt-free contact relays
Ports	
USB	n.1 USB 3.1 ports
Ethernet	10/100/1000 Mbps LAN
Power supply	
Power supplies	<ul style="list-style-type: none"> 12 Vdc POE 802.3at
Absorbed power	8 Watt max
Inbuilt protection	
The camera is protected against:	<ul style="list-style-type: none"> reverse polarity. voltage fluctuations greater than 17 Vdc. overloads with thermal protection. overvoltages (TVS) on USB and Ethernet ports.

HARDWARE FEATURES OF THE CAMERA

Certifications

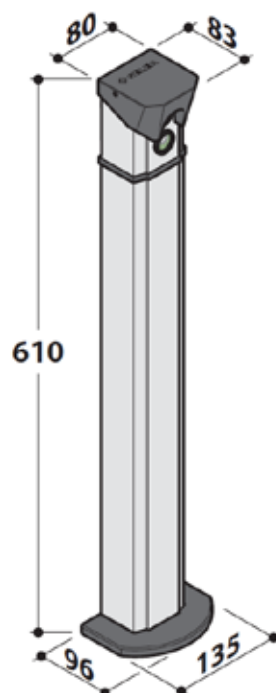
OCR	<ul style="list-style-type: none"> • 100% accuracy according to UNI 10772:2016 class A parameters for rear, two-line, motorcycle and moped number plates.
Data security	<ul style="list-style-type: none"> • ISDP10003:2020 - <i>Privacy by Default & Privacy by Design</i>

Standards

Respected standards	<ul style="list-style-type: none"> • EN62471 • EN55032 • EN55035 • EN61000 • EN62368-1 • EN60529 • EN62262 • EN60068 • EN60721 • European standard RoHS2 - 2011/65/UE
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General

Operating temperature	From -25°C to +45°C without the need of fans or heaters.
Protection rating	Standard IP66
Dimension (mm)	L=80 : H=610; D=83
Weight	2 Kg



SOFTWARE FEATURES OF THE CAMERA

Embedded algorithms	
Standard built-in functions	<ul style="list-style-type: none"> 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 communications	
Integrated webservice	<ul style="list-style-type: none"> Onvif Profile S 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 FTP and/or TCP/IP server.
Protocols	TCP/IP, UDP, HTTP, HTTPS, FTP, FTPS, RTP/RTSP, DHCP, SNMP.
Other integrated protocols	<ul style="list-style-type: none"> MODBUS TCP slave (allows the master to read the last license plate read) Non opto-isolated Wiegand (Isolator for Wiegand interface available on request) OSDP
Data security	
Data protection	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Linux Embedded
Standard built-in functions	<ul style="list-style-type: none"> Embedded FPGA video signal processing. Mode of operation: free-run, weighted, redundant, external trigger. 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	2.3 Megapixel Jpeg images and HD RTP/RTSP video stream with MPEG4,H264 and H265 encoding.
Accuracy	
OCR accuracy	<ul style="list-style-type: none"> 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. 30 Km/h maximum capture speed
Installation	
Geometry	<ul style="list-style-type: none"> Single lane detection Gate width: up to 4 m Reading distance: up to 6 m



Software for VEHICLE ACCESS CONTROL

CERTIFIED**Privacy by Design**
& Privacy by Default**ISDP 10003**

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.

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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