ANPR CAMERA

A genuine multi purpose AI camera, designed to built-in and for standalone installation

- ◼ 4K and IR sensitive camera

- ◼ Performs license plate recognition, video analytics and additional classification tasks at the same time at high framerates.

- ◼ Distincts cars from trucks, knows the direction of vehicles and completes recognition results with contextual data.

- ◼ Designed to connect with any third party system, it adds AI based license plate recognition to access control and parking solutions.

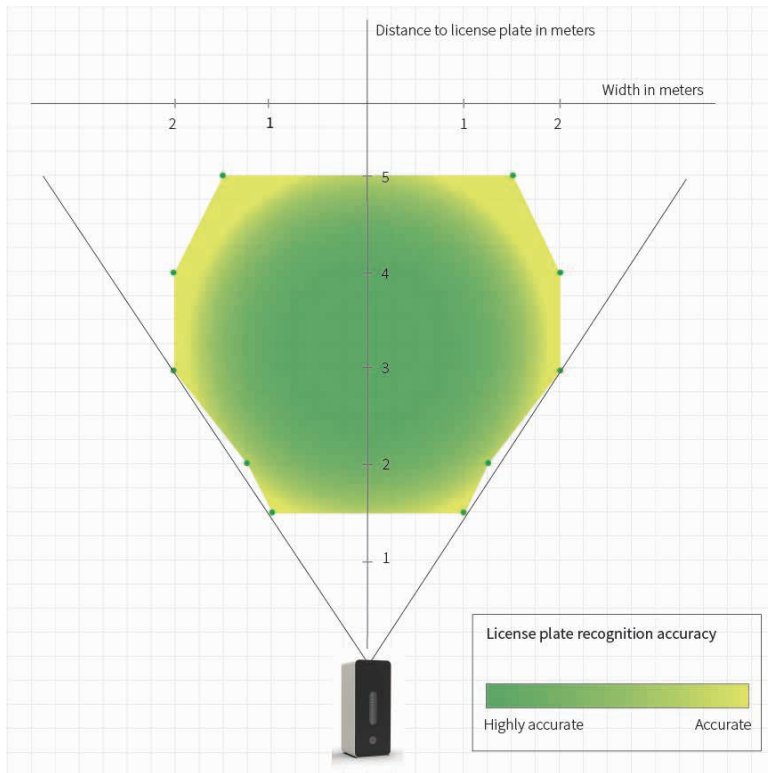| Technical specifications	
Embedded camera system	– All video processing and analytics is performed on board – No need for extra server capacity or power supply – Transmitting just the detection results and metadata ensures low bandwidth usage and privacy – Operation continues during Internet failure – Dual camera system: on board 4K and IR sensitive camera – Built-in IR illumination – ONVIF compatible video streaming – Powered by CortexFramework
Built-in and stand alone	– Wall, pole or ceiling mounting options all available – Built-in kit for integration into any bollard, access control periferral, EV charging unit and scan or patrol vehicle. – Single cable installation by PoE+ for power and network connectivity
Dual camera system generating images ideal for recognition	– 4K full colour sensor – IR sensitive sensor – Recognition quality images / video – Day and night performance – All weather and lighting conditions
Run multiple deep learning tasks in parallel	– People or object tracking, counting and detection – Movement analysis; for instance intrusion detection – Binary vehicle classification to detect unreadable license plates – Multiple class vehicle classification for traffic modalities – Custom trained networks
ANPR optimizations	– A daylight filter, infrared sensitive camera and built-in illumination for LPR in all weather and lighting conditions – 4K camera for overview, recording and extra source for ANPR processing – Accurate and fast ANPR engine based on deep learning and computer vision technology – Country specific syntax check – Vehicle classification to detect unreadable license plates – Direction of travel detection – Tailormade ANPR modules
Rule engine	– On board rule engine to trigger alarms and notifications on predefined events – Connector Axons to output the notifications to any third party system – High quality AI recognition minimises false alarms – Able to make autonomous decisions on predefined rules
Weatherproof and wide temperature range	– Deployment in any outdoor or industrial environment due to a rugged design and IP66 rating – Wide temperature range to ensure worldwide operation
Integration and connectivity	– Built-in Database, FTP server and Webservice (REST) connectivity – Built-in interfaces for e.g. Wiegand, RS485 and OSDP – I/O ports to operate and read electronic devices – Ready made connectors to VMS, POS, loyalty, PSIM, SMS, Access control and other management systems. – Triggers and actions – SDK for client side application development – ONVIF compatible video streaming
IO pins	– Built-in interfaces for e.g. RS485 and OSDP – I/O ports to operate and read electronic devices
Embedded video recording	– On board video storage capacity enables edge based recording – For incident tracking and performance monitoring – Cloud based video management – Bookmarking – Searcheable video fragments

ALPHATRONICS
Innovators in access technology

Range chart

Distance to license plate in meters

Width in meters

License plate recognition accuracy

Highly accurate   Accurate

Dimensions

80

40

190

M5

1/4 20 UNC

62

190

67

Technical specifications	
Cameras	
Image size IR sensor	1600 x 900 resolution, 25 fps, monochrome
IR camera	Infrared sensitive sensor
Overview camera	Color camera, low light sensitive, 30 fps
Operating conditions	
Recognition area	– 2-5 meters – Project adjustments possible
Max lane width	4 m see range chart.
Vehicle speed	0-30 km/h
Temperature	–18°C to 45°C environment
Enclosure	
Measurements	190 x 80 x 67 mm (L x W x H)
Weight	0,75 kg
Material	Powder coated aluminum zinc alloy
Protection level	IP67
Color	RAL9002
Power	
Power supply	– PoE+ IEEE802.3at, 30W – 12 – 48 Volt regulated DC
Hardware	
Illumination	Synchronized 850 nm illuminator
Daylight filter	Filtering sunlight and headlights. Only allowing infrared light passing through
LED's	High power white LEDs
Processing unit	– Embedded quad core 2.0GHz, 64 bit CPU – Neural processing unit
Connectivity	
Communication ports	1 x 10 / 100 / 1000 Base-T Ethernet port
Inputs / Outputs	– 2 x potential free contacts NOC + NCC – RS485, 3 EXT power and 4 x ground
Communication protocols	RS485, OSDP, http, https, ftp(s), JSON, ONVIF profile S
Article number	4-070101-0009-100

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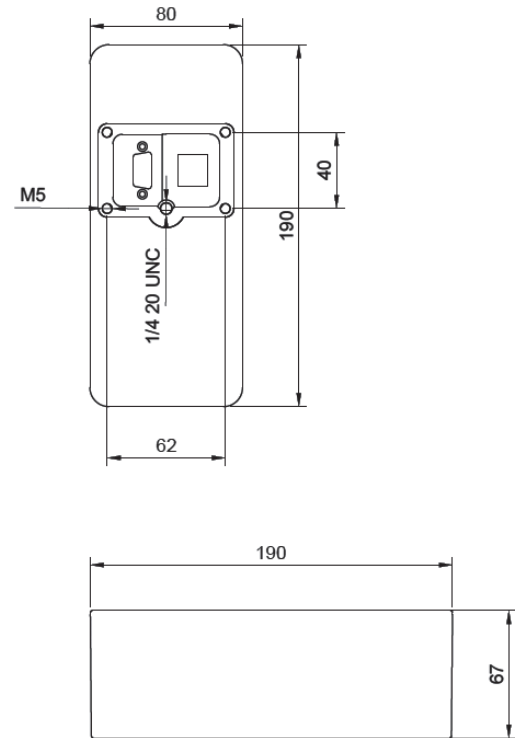Brandstraat 8a / 9160 Lokeren – Belgium | T. +32 9 340 54 70 | www.alphatronics.be | hello@alphatronics.be | Subject to technical modifications.