



TRAFFIC DIVISION





# ANPR solutions for ITS applications

Since 1988 Tattile has developed and produced Vision Systems for quality inspection on production lines and ANPR cameras for ITS applications.

A high-tech company with a strong international outlook. We have always distinguished ourselves by our sharp innovation capacity and collaborative spirit which animates the entire organization.

- Today Tattile is a completely renovated company, on sound financial basis, focused to future vision scenarios, enriched by a new management team dedicated to include state of the art technology into our products.
- Strong international projection, more than 70% of our turnover is derived from overseas (50% in Europe and 50% rest of the world), thanks to a network of top class international System Integrators and local partners.

Innovation, Customer Orientation and Flexibility are the main values of our organization. At Tattile, we are devoted to understanding our partner's needs, in order to provide innovative solutions, shaped accordingly to each specific situation or request.

We are fully engaged in the creation of cutting edge ANPR Cameras, able to fulfil the most demanding applications in the ITS market worldwide, always in compliance with strict quality standards, ensuring reliability and operating cost efficiency.

Operations: thanks to last generation tools in both Material Management and Production Planning (SAP BusinessOne®) and to a dedicated team of engineers, we implemented an extremely lean and responsive Supply Chain model, which allows us to achieve very short and competitive delivery times even for high volume tenders without sacrificing cost-effectiveness.





# OCR

## On field service

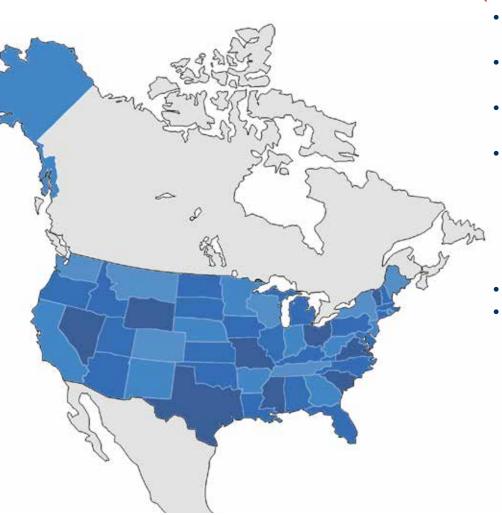
- Tattile's Field Application Engineers (FAE) are fully dedicated to assist our partners during Design, Installation and After sales
- Worldwide on-field service available for partners

## One step forward

- Embedded Technology: OCR and image processing are embedded in the ANPR Camera (no need of extra PCs or software licenses)
- Multicore Processor
- Multi transit/second management capability
- Optional Features:
  - Embedded brand, color and model recognition
  - Embedded optical vehicles classification
  - HD video streaming
  - Auto trigger
  - Optical speed estimation

countries where Tattile's Cameras are in operation

# born to be international



## OCR

- Tattile's OCR is developed by our internal software team (in-house development)
- Tattile offfers more than 110 in-house developed OCR libraries
- New OCR libraries can be developed and tested upon request
- Tattile can handle more than one OCR library onboard each ANPR camera; for instance, 28
   European countries are embedded in one single library
- New OCR libraries available for the US market
- Third parties OCR transferable on-board (no processing on external PC required)





# HW Scalability

# Scalable hardware architecture to meet increasing workloads

- The hardware system has been designed using a modular approach able to receive different processors ensuring future CPU evolutions for state of the art performances.
- Modular Platform designed to include various sensors in order to match all the applications required by the most challenging scenarios.
- Scalable HW architecture to include different FPGA modules and to ensure high-speed image processing in extreme situations.
- Use of FPGA grants a huge processing capability for real time image processing and ANPR analysis.

- SSD from 128 GB up to 1TB (Smart family).
- Modular architecture allows an easy customization of the HW platform according to the complexity of the application.
- Devices able to detect and read non-reflective licence plate, without any external illuminator.
- Extra sensitive sensor mounted on Smart 2HD's context camera ensures quality images also in low light conditions (from 25 Lux).







- Proprietary high performance plate reader algorithm
- Camera software can be fully upgraded from a remote connection
- Easy to use and configure with an integrated web interface
- SDK available for easy integration

Optional integration with third-party software running on-board to extend device capabilities

external light conditions

- Standardized interface allows future system
- Automatic grabbing parameter selection to adjust image acquisition according to

upgrades without significant reworks

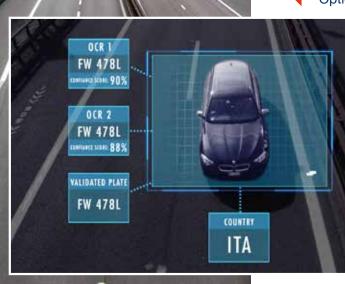
- Transit notification with customizable metadata, encryption and signature algorithms
- High performances software and scalability

# Add-on software

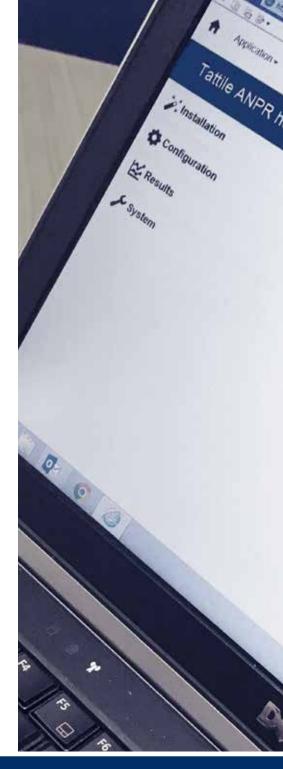
Tattile's add-on software libraries allow trasforming a simple ANPR camera into a big data collector, providing a wide range of information for different purposes such as security, traffic analysis, smart cities, data classification, pollution estimation and traffic statistics.

All add-on software can be uploaded even if the camera is already installed.

- A BCC Brand Class and Color recognition
- **B** Rigel Traffic analysis and incident detection
- C Inspector Traffic data management system
- **D** Easinstall App for remote camera configuration and performance check



		SMART		BASIC			ANI	
		2HD	Speed	Traffic Light	Short Range	Long Range	Vega1	Mc
	Brand Recognition	<b>√</b>	<b>√</b>	<b>√</b>			<b>√</b>	
ВСС	Model Recognition	<b>√</b>	<b>√</b>	<b>√</b>			<b>√</b>	
ьсс	Vehicle Classification	<b></b>	1	<b>√</b>			<b>√</b>	
	Vehicle Color	<b>√</b>	✓	✓			✓	
	Stopped vehicle							
	Slowdown and queue							
Disc. I <b>T</b> (6)	Wrong way							
Rigel Traffic analysis	Pedestrian detection							
and incident	Smoke, low visibility							
letection	Lost cargo							
	Traffic density							
	Vehicle counting							
	Traffic statistics						<b>✓</b>	
	Average speed enforcement		<b>√</b>			<b>√</b>		
	Vehicles research		<b>√</b>			<u> </u>		
nspector raffic data	Origin destination		<b>/</b>	<b>√</b>	<b>√</b>	1		
nanagement	Geo-referenced map		<b>√</b>		<u> </u>	<u> </u>		
system	Transit movements and traffic statistics		/	1	<u> </u>	1		
	Access control	<b>/</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	•
	I							
Easinstall	Easy to Install		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	
NAI	Self triggering based on image analysis							
Others	Optical speed estimation		<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>





# BCCM

# Brand, Class, Color and Model recognition

- Vehicle brand, class, color and model recognition algorithm running inside the camera
- License plate, brand, class, color and model create the so-called vehicle «fingerprint» in a single report
- All information provided by a single source
- No extra cost for external software, processing server and integration time

# Applications:

- Security
- Crime enforcement
- Tolling
- Smart City



# Rigel Traffic Monitoring & Incident Detection

B

- Rigel plugin is an extension of Tattile's double head solutions.
  - It enables the traffic analysis features providing an all-in-one solution for both reading plates and traffic monitoring.
- Rigel system is a real time traffic analyser able to manage alarms and notification; reporting plate numbers and a number of traffic events directly to the aggregating software running on a remote server.
- The aggregating software works as a forwarder of all the collected events to all 3rd party systems like VMS or SCADA platforms, supporting standard protocols.
- The integration with the most commonly used video management systems and alerting systems allows the control room to have a quick overview of all traffic events and take actions accordingly.

The software is able to work in different scenarios, either in approaching and receding traffic, day and night and on multiple lanes.

## Available analysis:

- Stopped vehicle
- Slowdown and queue
- Wrong way
- Pedestrian detection
- Smoke, low visibility
- Lost cargo
- Traffic density
- Vehicle counting

## Applications:

- Traffic monitoring
- · Automatic incident detection
- Traffic data collection
- Smart City





# Inspector Traffic Data Manager

G

- Inspector is a scalable platform able to centralize the data acquired from different cameras distributed on the field.
- The system is scalable and extensible to perform average speed enforcement control, security applications, traffic statistics and access control.
- Inspector can analyse collected data according to configurable rules and undertake a number of actions based on the results: opening gates, sending emails, posting messages on variable message panels.
- Inspector generates reliable reports; various research queries can be done.

- Inspector does not need to be installed on client machines, the SW can easily be accessed with any browser; the multiuser software manages multiple connections and queries at the same time.
- Safe login to the system using credentials (username and password), leaving the Possibility to set up different user profiles.
- Possibility to embed the software in the user's apps (or third parties) thanks to Web Service calls.

## Applications:

- Average speed enforcement
- Vehicles Research; transit movements control (reported vehicles) based on a configurable internal database or connecting to a database
- Origin destination
- Geo-referenced map indicating devices position
- Transit movements and traffic statistics generation, possibility to personalise statistics
- Access control

# Easinstall

# Quick and fast camera configuration



Tattile proprietary App for a quick and fast installation, the essential time-saving tool for any installer

- Main functionalities:
  - Discover available cameras via Wifi
  - Connection to a camera via SSID (Service Set Identifier) / Hidden SSID
  - Take a screenshot of the ANPR camera
  - Remote update / Clear of the camera's public keys
  - Send email directly to technical support
  - Create Hotspot connection
  - Web view support
  - QR Code scan
- The App is available on Android market and on Apple store







# Application & Solution

								_
APPLICATION			SMART	•		BASIC		
7 (1 1		2HD	Speed	Traffic Light	Short	Long	Vega1	
	Free flow							
	Stop & Go							
Tolling System	LTZ 1 lane					1		
	LTZ 2 lanes					•	· ·	
								_
	Security & Tracking 1 lane					1	<b>✓</b>	
Vahiala Tracking	Security & Tracking 2 lanes	<b>✓</b>						
Vehicle Tracking	Mobile ANPR							
	Parking & Access control				<b>✓</b>			
Enforcement	Red Light			<b>√</b>				
	Speed		✓					
System	Priority lanes					✓	<b>√</b>	
	Tolling	<b>✓</b>						

# ANPR solutions





Vega Smart HD p. 16

Vega Smart 2HD p. 16

Vega Smart Speed p. 18

Vega Smart Traffic Light p. 20

Vega1 p. 24

Vega Basic p. 26

ANPR Mobile p. 28



# The Vega Smart Family

Automatic Number Plate Reader

The camera has two multicore processors on board with Linux operating system

- The Vega Smart line is built on a high performance base allowing a high scalability, for high-end, multivehicle per second applications
- With embedded licence plate recognition, image analysis software, high resolution sensors, low power consumption and a web server on-board, the Vega Smart camera allows performing innovative applications
- The camera can be integrated/connected to external devices and can receive vehicle's class data from external classifier (laser-scanner, radar, loops, etc.), tag identifier from RFID antenna and vehicle's axels number data from external device
- Stand alone: thanks to the local buffering of information, the system is able to work also in case of disruption of data connection
- Camera designed to detect and recognise reflective and non-reflective licence plate
- New context camera color sensor capable of providing good quality images even in low light conditions (from 25 Lux)





- Multilane Free Flow
- Police enforcement
- Vehicle tracking and monitoring
- Border control
- Tax and insurance control
- Congestion charge, access control to limited traffic areas

# Included Features and Optionals

	Vega Smart HD			Vega Smart 2HD		Vega Smart Speed		Vega Smart Traffic Light	
	Incl.	Opt.	Incl.	Opt.	Incl.	Opt.	Incl.	Opt.	
Double Processor	Х		Х		Х		Х		
FPGA	Х		Х		Х		Х		
OCR 5Mp Sensor	Х		Х		Х		Х		
Color Sensor			Х		Х		Х		
Micro Sd	Х		Х		Х		Х		
Embedded Illuminator	Х		Х		Х		Х		
Radar					Х				
GPS		Х		Х	Х		Х		
LTE		Х		Х		Х		Х	
SSD		Х		Х		Х		Х	
Linux Os	Х		Х		Х		Х		
Traffic Light Violation SW							Х		
Rigel Traffic Analysis				Х					
OCR	Х		Х		Х		Х		
Kemler/ADR recognition	Х		Х		Х		Х		
Autoiris	Х		Х		Х		Х		
Easinstall App	Х		Х		Х		Х		
Brand Recognition				Х		Х		Х	
Color Recognition				Х		Х		Х	
Model Recognition				Х		Х		Х	
Optical Classification				Х		Х		Х	
Third party OCR		Х		Х		Х		Х	
Speed Estimation	Х		Х		Х		Х		
HD Video			Х		Х			Х	

Incl. = Included / Opt. = Optional



# Vega Smart HD - Vega Smart 2HD

**Automatic Number Plate Reader** 

## The Vega Smart Line

It is built over a highly performing base allowing outstanding scalability.

Optionals can be installed upon request.

Impressive capability to keep the device always updated.



## Application

- Toll collection
- Free Flow
- Traffic monitoring
- Security

# Free-Flow Tolling - Security

	SMART HD	SMART 2HD			
Software features and P		OMAITI ZIID			
Lane Detected	criormanoc	)			
Max Vehicle Speed [km/h]	250				
Working Distance [m]	Up t	o 35			
Detection	99	%			
Reading	>99	5%			
OCR	ANPR engir	ne on board			
Third party OCR	opti	onal			
Capture rate	75	fps			
Classification	NA	optional			
Vehicle Color	NA	optional			
Vehicle Brand	NA	optional			
Vehicle Model	NA	optional			
AES256	Yes				
SHA2	Yes				
Compression	JPG				
Streaming	NA Video streaming via standard RTSP proto				
Configuration					
Web Server	Installation and configuration	on by Web Server on board			
TCP/IP Server	Configuration and monitoring through TCP/IP protocol. (SDK provided)				
Date and Hour	Synchronization via NTP protocol, IEEE1588, GPS				
Software Update	Interface and SDK				
Data Transmission					
FTP	FTP Client to FTP Serve transmission; Multiple I	er mode for remote data P servers addressable			
TCP/IP	Tattile TCP/IP open pro	otocol; (SDK provided)			
Standard protocols	XML; SNMP; NTCIP; DATEX	2; UTMC; ONVIF; MODBUS			
Serial Port	Insulated RS485				

	SMART HD	SMART 2HD			
Op. Mode					
Free Run	Continuous processing with automatic vehicle detection, even without plate.				
Triggered	Image capture and processing triggered by Ethernet command or digital signal				
System					
ANPR camera	5 MP	X BW			
Aiti ii camera	5 MPx Color (	Color Version)			
Context camera	NA	2.3 Megapixel color CMOS sensor			
Illuminator	12 high po	ower LEDs			
Lenses	C-Mount. Many focal lengths available.				
Operating System	Linux Operating System				
Digital i/o	6 Optoisolated input - 4 Relay Output - 1 Strobe output				
Connectors	Waterproof circular connector				
IP Protection	Waterproof IP68				
Ethernet	GigaBit Ethernet 10/100/1000				
Storage	uSD up to 128 GB				
Otorage	Optional HD/SSD				
GPS	Optional				
LTE	Optional				
WiFi (Easinstall)	Ye	es			
Technical Datas					
Operating & Storage Temperature	From -40° to +60° C				
Operating & Storage Humidity	Up to 95% non condensing				
Dimensions	290 x 127 x 23	5 mm (WxHxL)			
Weight [kg]	5	.5			
Power supply voltage	24	Vdc			
Power consumption	50 W (max)				

Vega Smart HD	
F01760	Smart HD
F01767	Smart HD Non Reflective Plates

Vega Smart Color HD		
F01762	Smart Color HD	

Vega Smart 2HD				
<b>F01761</b> Smart 2HD				
F01768	Smart 2HD Non Reflective Plates			

Vega Smart Color 2HD		
F01765	Smart Color 2HD	



# Vega Smart Speed

**Automatic Number Plate Reader** 

## Real time detection of infringements with OCR on board

Embedded multi tracking radar

No post-processing required

Detection of vehicles exceeding average speed or punctual speed limits

Ability to recognise every plate passing under the camera and not only violators. This is very useful for security or statistical purposes

All transit plates are recorded and available for:

- Speed enforcement (spot/average)
- Tax and insurance control
- Vehicle tracking
- Traffic monitoring



## Application

- Enforcement
- Traffic monitoring
- Security

# Speed Enforcement

	SMART SPEED
Software features and I	
Lane Detected	2
Max Vehicle Speed [km/h]	250
Working Distance [m]	Up to 35
Detection	99%
Reading	>95%
OCR	ANPR engine on board
Third party OCR	optional
Capture rate	75 fps
Classification	optional
Vehicle Color	optional
Vehicle Brand	optional
Vehicle Model	optional
AES256	Yes
SHA2	Yes
Compression	JPG
Streaming	Video streaming via standard RTSP protocol
Configuration	
Web Server	Installation and configuration by Web Server on board
TCP/IP Server	Configuration and monitoring through TCP/IP protocol. (SDK provided)
Date and Hour	Synchronization via NTP protocol, IEEE1588, GPS
Software Update	Upgrading via Web Interface and SDK
Data Transmission	
FTP	FTP Client to FTP Server mode for remote data transmission; Multiple IP servers addressable
TCP/IP	Tattile TCP/IP open protocol; (SDK provided)
Standard protocols	XML; SNMP; NTCIP; DATEX2; UTMC; ONVIF; MODBUS
Serial Port	Insulated RS485

	SMART SPEED		
Op. Mode			
Free Run	Continuous processing with automatic vehicle detection, even without plate		
Triggered	Image capture and processing triggered by Ethernet command or digital signal		
System			
ANDD comerce	5 MPX BW		
ANPR camera	5 MPx Color (color version)		
Context camera	2.3 Megapixel color CMOS sensor		
Illuminator	12 high power LEDs, InfraRed @ 850 nm		
Lenses	C-Mount. Many focal lengths available		
Operating System	Linux Operating System		
Digital i/o	6 Optoisolated input - 4 Relay Output - 1 Strobe output		
Connectors	Waterproof circular connector		
IP Protection	Waterproof IP68		
Ethernet	GigaBit Ethernet 10/100/1000		
Storage	uSD up to 128 GB		
Storage	Optional HD/SSD		
GPS	Yes		
LTE	Optional		
WiFi (Easinstall)	Yes		
Technical Data			
Operating & Storage Temperature	From -40° to +60° C		
Operating & Storage Humidity	Up to 95% non condensing		
Dimensions	404 x 127 x 235 mm (WxHxL)		
Power supply voltage	24 Vdc		
Power consumption	50 W (max)		

Vega Smart Speed				
F01766	Smart Speed			



# Vega Smart Traffic Light

**Automatic Number Plate Reader** 

## The new concept to safeguard the intersections

Smart Traffic Light allows the red light status identification through image analysis.

Red light violation detected by image

analysis (without external sensors), no external device required and reduced installation and maintenance costs. The system is able to manage different kinds of traffic installations (one or two lanes, one traffic light each lane or every two lanes).

- Ability to recognise every plate passing under the camera and not only violators. This is very useful for security or statistical purposes
- All transit plates are recorded and availabel for:
  - Red light enforcement
  - Tax and insurance control
  - Vehicle tracking
  - Traffic monitoring

## Application

- Enforcement
- Traffic monitoring
- Security



# Traffic Light Enforcement

	SMART TRAFFIC LIGHT	
0-66		
Software features and I	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
Lane Detected	2	
Max Vehicle Speed [km/h]	250	
Working Distance [m]	Up to 25	
Detection	99%	
Reading	>95%	
OCR	ANPR engine on board	
Third party OCR	optional	
Capture rate	75 fps	
Classification	optional	
Vehicle Color	optional	
Vehicle Brand	optional	
Vehicle Model	optional	
AES256	Yes	
SHA2	Yes	
Compression	JPG	
Streaming	Video streaming via standard RTSP protocol	
Configuration		
Web Server	Installation and configuration by Web Server on board	
TCP/IP Server	Configuration and monitoring through TCP/IP protocol. (SDK provided)	
Date and Hour	Synchronization via NTP protocol, IEEE1588, GPS	
Software Update	Upgrading via Web Interface and SDK	
Data Transmission		
FTP	FTP Client to FTP Server mode for remote data transmission; Multiple IP servers addressable	
TCP/IP	Tattile TCP/IP open protocol; (SDK provided)	
Standard protocols	XML; SNMP; NTCIP; DATEX2; UTMC; ONVIF; MODBUS	
Serial Port	Insulated RS485	

	SMART TRAFFIC LIGHT	
Op. Mode		
Free Run	Continuous image capture and processing	
Triggered	Image capture and processing triggered by Ethernet command or digital signal	
System		
ANPR camera	5 MPX BW	
ANPR Camera	5 MPx Color (color version)	
Context camera	2.3 Megapixel color CMOS sensor	
Illuminator	12 high power LEDs, InfraRed @ 850 nm	
Lenses	C-Mount. Many focal lengths available	
Operating System	Linux Operating System	
Digital i/o	6 Optoisolated input - 4 Relay Output - 1 Strobe output	
Connectors	Waterproof circular connector	
IP Protection	Waterproof IP68	
Ethernet	GigaBit Ethernet 10/100/1000	
Storage	uSD up to 128 GB	
Storage	Optional HD/SSD	
GPS	Yes	
LTE	Optional	
WiFi (Easinstall)	Yes	
Technical Data		
Operating & Storage Temperature	From -40° to +60° C	
Operating & Storage Humidity	Up to 95% non condensing	
Dimensions	290 x 127 x 235 mm (WxHxL)	
Weight [kg]	5.5	
Power supply voltage	24 Vdc	
Power consumption	50 W (max)	

Vega Smart Traffic Light		
F01764 Smart Traffic Light		
F01769 Smart Traffic Light Non Reflective Plates		



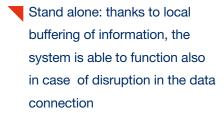
# Vega Basic Family

**Automatic Number Plate Reader** 

Mainly targeted to stop & go tolling, parking and access control systems, with a maximum input power of 13W,

the Vega Basic line features a Power-over-Ethernet (POE) interface for minimizing the installation and maintenance time New generation full HD sensor for reading reflective and non reflective plates

A multicore processor on board with Linux operating system



Extra compact size to reduce the installation impact

The Vega Basic is easy to install and does not require an external IR lighting

Vandal proof connectors

# Small and Performant

# Vega Basic Family Applications

- Stop & Go tolling
- Parking
- Access control
- Urban road tracking
- Congestion charge
- Access control to limited traffic areas

# Included Features and Optionals

	Vega Basic Short range	Vega Basic Long range	Vega1	
			Incl.	Opt.
Multicore Processor	Х	Х	Х	
OCR Bw sensor	X	X	Х	
OCR Color sensor (color version)	Х	Х		
Context color sensor			Х	
Video streaming			Х	
Micro Sd	Х	Х	Х	
Linux Os	Х	Х	Х	
OCR	Х	Х	Х	
Kemler/ADR recognition	Х	Х	Х	
Autoiris	Х	Х	Х	
Easinstall App	Х	Х	Х	
Speed Estimation	Х	Х	Х	
Model Recognition				Х
Class Recognition				Х
Brand Recognition				Х
Color Recognition				Х

Incl. = Included / Opt. = Optional



Vandal proof connectors



# Vega1

**Automatic Number Plate Reader** 

**The Vega1** is a dual channel camera built in a compact case.

It is mainly targeted to single lane vehicle tracking, traffic limited areas and priority lanes. Its high sensitivity image sensors are available for ANPR reading, video streaming even in extreme and low light conditions.

The camera allows an easy setup to minimize the installation and maintenance time. Thanks to its local storage, it can work stand alone in case the connectivity is not available.

The Vega1 is compact, easy to install and does not require an external IR lighting. The extra compact case reduces installation impact.



# Single Lane Track

## Applications:

## **Optional functionalities:**

- Single lane road tracking
- GPS
- Vehicle class

- Surveillance and access control
- LTE Vehicle color

• Congestion charge

- Vehicle brand
- Vehicle model

• Limited traffic areas, priority lanes

	VEGA1	
Software features and Performance		
Lane Detected	1	
Max Vehicle Speed [km/h]	200	
Working Distance [m]	Up to 25	
Detection	99%	
Reading	>95%	
OCR	ANPR engine on board	
Third party OCR	optional	
Capture rate	Up to 60 fps	
Classification	optional	
Vehicle Color	optional	
Vehicle Brand	optional	
Vehicle Model	optional	
AES256	Yes	
SHA2	Yes	
Compression	JPG	
Streaming	Color video streaming via standard RTSP protocol	
Configuration		
Web Server	Installation and configuration with on board Web Server	
TCP/IP Server	Configuration and monitoring through TCP/IP protocol. (SDK provided)	
Date and Hour	Synchronization via NTP protocol, IEEE1588, GPS	
Software Update	Upgrading via Web Interface and SDK	
Data Transmission		
FTP	FTP Client to FTP Server mode for remote data transmission; Multiple IP servers addressable	
TCP/IP	Tattile TCP/IP open protocol; (SDK provided)	
Standard protocols	XML; SNMP; NTCIP; DATEX2; UTMC; ONVIF; MODBUS	
Serial Port	Insulated RS485	

	VEGA1	
Op. Mode		
Free Run	Continuous image capture and processing	
Triggered	Image capture and processing triggered by Ethernet command or digital signal	
System		
ANPR camera	Up to 3 Megapixel grayscale sensor	
Context camera	Up to 3 Megapixel color sensor	
Illuminator	10 high power LEDs, InfraRed @ 850 nm	
Lenses	C-Mount. Many focal lengths available.	
Operating System	Linux Operating System	
Digital i/o	2 Inputs - 2 Outputs - 1 Strobe output	
Connectors	Waterproof circular connector	
IP Protection	Waterproof IP67	
Ethernet	GigaBit Ethernet 10/100/1000	
Storage	uSD up to 128 GB	
GPS	Optional	
LTE	Optional, external	
WiFi (Easinstall)	Yes	
Technical Data		
Operating & Storage Temperature	From -40° to +60° C	
Operating & Storage Humidity	Up to 95% non condensing	
Dimensions	187 x 103,5 x 216 mm (WxHxL)	
Power supply voltage	24 Vdc or PoE+ 802.3at Type2	
Power consumption	15 W (max)	

Vega 1	
F01870	Vega 1 Long Range
F01872	Vega 1 Short Range



# Vega Basic Short Range-Long Range

**Automatic Number Plate Reader** 

The Vega Basic Line is built around a small and compact case

POE allows a single wire connection

Optionals can be installed upon request

Impressive capability to keep the device always updated

Available in BW and Color version



	BASIC SHORT RANGE	BASIC LONG RANGE		
Software features and Pe	Software features and Performance			
Lane Detected	1			
Max Vehicle Speed [km/h]	70	150		
Working Distance [m]	up to 8	up to 25		
Detection	99	%		
Reading	>95	5%		
OCR	ANPR engir	ne on board		
Capture rate	Up to	60 fps		
AES256	Yes			
SHA2	Yes			
Compression	JPG			
Configuration	Configuration			
Web Server	Installation and configuration by Web Server on board			
TCP/IP Server	Configuration and monitoring through TCP/IP protocol. (SDK provided)			
Date and Hour	Synchronization via NTP protocol, IEEE1588			
Software Update	Upgrading via Web Interface and SDK			
Data Transmission				
FTP	FTP Client to FTP Server mode for remote data transmission; Multiple IP servers addressable			
TCP/IP	Tattile TCP/IP open pro	otocol; (SDK provided)		
Wiegand	Yes			
Standard protocols	XML; SNMP; NTCIP; DA	TEX2; UTMC; MODBUS		
Serial Port	Insulated RS485			

# Parking Access Control - Stop & Go Tolling

	BASIC SHORT RANGE	BASIC LONG RANGE
Op. Mode		
Free Run	Continuous image ca	pture and processing
Triggered	Image capture and processing triggered by Ethernet command or digital signal	
System		
ANPR camera	2 MP	X BW
ANTA Calliela	2 MPx Color (	Color Version)
Illuminator	8 high power LEDs,	InfraRed @ 850 nm
Lenses	C-Mount. Many focal lengths available	
Operating System	Linux Operating System	
Digital i/o	2 Optoisolated input - 2 Relay Output - 1 Strobe output	
IP Protection	Waterproof IP67	
Ethernet	GigaBit Ethernet 10/100/1000	
Storage	uSD up to 128 GB	
WiFi (Easinstall)	Yes	
Vandal proof Connector	Yes	
Technical Data		
Operating & Storage Temperature	From -40°	to +60° C
Operating & Storage Humidity	Up to 95% non condensing	
Dimensions	178 x 90 x 133 mm (WxHxL)	
Weight [kg]	1.	5
Power supply voltage	24 Vdc, PoE	
Power consumption	12 W (max)	

## The Vega Basic Short Range

can read up to 8 meters far at 70km/h max speed

## The Vega Basic Long Range

can read up to 25 meters far at 150km/h max speed

# Color Color

Vega Basic		
F01750	Basic short range	
F01752	Basic long range	
Vega Basic Color		
F01751	Basic color short range	
F01753	Basic color long range	



# ANPR Mobile

**Automatic Number Plate Reader** 

## **ANPR Mobile**

is the smart solution to prevent crime, offered as an aid to Police Forces. It is an evolved and modern license plate reading system, installed on the cars of specialized operational departments and/or intelligence services, as a support to surveillance and protection, serving as a tireless watchful eye on the road.

ANPR Mobile is the latest generation system with Megapixel sensors that can scan up to 60 license plates per second, front and rear, in any light condition. It is part of the sophisticated Tattile ANPR (Automatic Number Plate Reader) All On Board camera family, to read license plates in movement.



Wi-Fi data transmission from the unit to the pc/tablet

GPS on board

Embedded licence plate analysis (OCR on board)

Real time processing: up to 60 fps

# Police Enforcement - Crime Prevention

## Software Features

	ANPR Mobile	
Licence Diete Des		
Licence Plate Recognition		
OCR	ANPR engine on board	
Capture rate	Up to 60 fps	
Configuration		
Web Server	Installation and configuration by Web Server on board	
TCP/IP Server	Configuration and monitoring through TCP/IP protocol	
Date and Hour	Synchronization via SNTP protocol or GPS	
Software Update	Upgrading via Web Interface and SDK	
Data Transmission		
FTP	FTP Client to FTP Server mode for remote data transmission; two IP address management	
TCP/IP	Tattile TCP/IP open protocol; two IP address management	
Streaming	Video streaming via standard RTSP protocol	
Operating Mode		
Free Run	Continuous processing with automatic plate detection	

## **Technical Data**

	ANPR Mobile	
System		
ANPR camera	1920 x 1080 Monochrome CMOS sensor	
Context camera	1920 x 1080 Color CMOS sensor	
Illuminator	Short range: 6 LEDs High power infrared @ 850nm	
mummator	Medium/long range: 10 LEDs High power infrared @ 850nm	
Lenses	C-Mount. Many focal length available	
Operating System	Linux	
Connectors	Waterproof circular connector	
Network	Fast Ethernet 10/100 and WiFi 802.11 b/g/n	
Storage	Up to 128 GB	
Environment, Size, Power		
Operating & Storage Temperature	From -30° to +60° C	
Operating & Storage Humidity	Up to 95% non condensing	
Dimensions	178 x 76 x 141 mm (WxHxL)	
Weight	1,650 Kg	
Protection	Waterproof IP66/IP67	
Power supply voltage	12 Vdc	
Power consumption	15 W	

ANPR Mobile	
F01710	ANPR MOBILE SYSTEM short range
F01845	ANPR MOBILE SYSTEM medium range
F01696	ANPR MOBILE SYSTEM long range





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