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 fulfill 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.
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

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.

Tattile’s OCR is developed by our internal software team (in-house development).

Tattile offers 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).

Tattile’s OCR is born to be international.

www.tattile.com
Top Performance Hardware

- Embedded multicore processors
- High sensitivity sensors
- Embedded FPGA
- Scalable device
- LTE and GPS available as options
- SSD from 128GB up to 1TB according to customer needs
- Smart design
- IP68 protection grade
- Extended temperature range (-40°C / +60°C external temperature)

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).
## Top Performance Software

- **Linux OS platform**
- **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**
- **Standardized interface allows future system upgrades without significant reworks**
- **Automatic grabbing parameter selection to adjust image acquisition according to external light conditions**
- **Transit notification with customizable metadata, encryption and signature algorithms**
- **High performance software and scalability**

### Add-on software

Tattile’s add-on software libraries allow transforming 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.

<table>
<thead>
<tr>
<th>BCC</th>
<th>Smart Recognition</th>
<th>License Plate Recognition</th>
<th>Plate Color</th>
</tr>
</thead>
<tbody>
<tr>
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<td>✓ ✓ ✓ ✓ ✓</td>
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<table>
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<thead>
<tr>
<th>Rigel Traffic analysis and incident detection</th>
<th>Smart Speed detection</th>
<th>Lane Detection</th>
<th>Incident Detection</th>
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<thead>
<tr>
<th>Inspector Traffic data management system</th>
<th>Long Range Detection</th>
<th>Long Range Classification</th>
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<table>
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<tr>
<th>Easinstall App</th>
<th>Remote Camera Configuration and Performance Check</th>
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</thead>
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</tbody>
</table>

### SMART Features

- **HD Speed Traffic Light**

<table>
<thead>
<tr>
<th>HD</th>
<th>Speed</th>
<th>Traffic Light</th>
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<tbody>
<tr>
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### BASIC Features

<table>
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<tr>
<th>HD</th>
<th>Speed</th>
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### ANPR Mobile

<table>
<thead>
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<th>HD</th>
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<th>Traffic Light</th>
</tr>
</thead>
<tbody>
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<td>✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓</td>
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</tbody>
</table>
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

Vehicle brand, class, color and model recognition

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.

Applications:
• Traffic monitoring
• Automatic incident detection
• Traffic data collection
• Smart City

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.

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

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

www.tattile.com
Inspector
Traffic Data Manager

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

Inspector does not need to be installed on client machines, the SW can easily be accessed with any browser, the multi-user 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.

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 analyses 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.

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 personalize statistics
• Access control

The App is available on Android market and on Apple store

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 cameras’ public keys
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The App is available on Android market and on Apple store

www.tattle.com
### APPLICATION & Solution

#### APPLICATION

<table>
<thead>
<tr>
<th>Application Type</th>
<th>SMART</th>
<th>BASIC</th>
<th>ANPR Mobile</th>
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<tr>
<td>Tolling System</td>
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<tr>
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<td>HD</td>
<td>✓</td>
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</tr>
<tr>
<td></td>
<td>Speed</td>
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<tr>
<td></td>
<td>Traffic Light</td>
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<td></td>
<td>LTZ 1 lane</td>
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<td></td>
<td>LTZ 2 lanes</td>
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<tr>
<td>Vehicle Tracking</td>
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<tr>
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<td>Enforcement System</td>
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<td>Priority lanes</td>
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<td>Tolling</td>
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#### ANPR Solutions

- Vega Smart HD: p. 16
- Vega Smart 2HD: p. 16
- Vega Smart Speed: p. 16
- Vega Smart Traffic Light: p. 20
- Vega1: p. 24
- ANPR Mobile: p. 20
The Vega Smart Family

Automatic Number Plate Reader

- 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 recognize 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)

Vega Smart Family Applications
- 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 Options

<table>
<thead>
<tr>
<th>Vega Smart HD</th>
<th>Vega Smart 2HD</th>
<th>Vega Smart Speed</th>
<th>Vega Smart Traffic Light</th>
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<tbody>
<tr>
<td>Multicore Processor</td>
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<td>FPGA</td>
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<td>X</td>
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<td>OCR 5Mp Sensor</td>
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<td>Color Sensor</td>
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<td>Color App</td>
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<td>Brand Recognition</td>
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<td>VLC Codec</td>
<td>X</td>
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<td>X</td>
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</tbody>
</table>

Incl. = Included / Opt. = Optional
The Vega Smart Line

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

Options can be installed upon request.

Impressive capability to keep the device always updated.

Application
- Toll collection
- Free Flow
- Traffic monitoring
- Security

Vega Smart HD - Vega Smart 2HD

Specifications:
- Max Vehicle Speed: 250 km/h
- Working Distance: up to 35 m
- Detection: 99%
- Reading: >95%
- OCR: ANPR engine on board, Third party OCR optional
- 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 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
- TCP/IP: Tattile TCP/IP open protocol
- Standard protocols: XML, SNMP, NTCIP, DATEX2, UTMC, ONVIF, MODBUS

Serial Port:
- Insulated RS485

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

GPS:
- Optional

LTE:
- Optional

WiFi (Easinstall):
- Yes

Technical Data:
- Operating & Storage:
  - Temperature: From -40° to +60° C
  - 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)

Part Numbers:
- Vega Smart HD: F01760
- Smart HD: F01767
- Smart HD Non Reflective Plates: F01762
- Vega Smart Color HD: F01762
- Smart Color HD: F01765
- Vega Smart Color 2HD: F01765
- Smart Color 2HD: F01768
- Smart 2HD Non Reflective Plates: F01768

www.tattile.com
Vega Smart Speed
Automatic Number Plate Reader

- Real time detection of infringements with OCR on board
- Embedded multi tracking radar
- No post-processing required
- No vehicle passing under the camera and not only violators
- This is very useful for security or statistical purposes
- Detection of vehicles exceeding average speed or punctual speed limits
- Ability to recognize every plate passing under the camera and not only violators

All transit plates are recorded and available for:
- Speed enforcement (spot/average)
- Tax and insurance control
- Vehicle tracking
- Traffic monitoring

SMART SPEED
Software features and Performance

<table>
<thead>
<tr>
<th>Feature</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lane Detection</td>
<td>100%</td>
</tr>
<tr>
<td>Max Vehicle Speed [km/h]</td>
<td>250</td>
</tr>
<tr>
<td>Working Distance [m]</td>
<td>Up to 35</td>
</tr>
<tr>
<td>Tracking</td>
<td>99%</td>
</tr>
<tr>
<td>Reading</td>
<td>&gt;95%</td>
</tr>
<tr>
<td>OCR</td>
<td>Multi ANPR Engine on board</td>
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<td>Third party OCR</td>
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<td>Capture rate</td>
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<td>Vehicle Color</td>
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<td>Vehicle Brand</td>
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<td>Vehicle Model</td>
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<td>SHA2</td>
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<td>Compression</td>
<td>JPG</td>
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<tr>
<td>Streaming</td>
<td>Video streaming via standard RTSP protocol</td>
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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 (Client to Server mode for remote data transmission), XML, SNMP, NTCIP, DATEX2, UTMC, ONVIF, MODBUS

Minimal System
- ANPR camera: 5 MPx BW (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, Optional HD/SSD
- GPS: Yes
- LTE: Optional
- WiFi (Easistall): Yes

Technical Data
- Operating & Storage Temperature: From -40° to +60° C
- Humidity: Up to 95% non condensing
- Dimensions: 404 x 127 x 235 mm (WxHxL)
- Power supply voltage: 24 Vdc
- Power consumption: 50 W (max)

Part Numbers
- F0766: Vega Smart Speed

*Application
- Enforcement
- Traffic monitoring
- Security

*Speed Enforcement

www.tattile.com

Custom ANPR Solutions
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 recognize 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:
  - Red light enforcement
  - Tax and insurance control
  - Vehicle tracking
  - Traffic monitoring

Application
- Enforcement
- Traffic monitoring
- Security

Traffic Light Enforcement

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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<tbody>
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<td>Lane Detection</td>
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<td>Max Vehicle Speed</td>
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<tr>
<td>Working Distance</td>
<td>Up to 25 [m]</td>
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<tr>
<td>Detection Accuracy</td>
<td>99%</td>
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<tr>
<td>Reading Accuracy</td>
<td>&gt;95%</td>
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<tr>
<td>OCR</td>
<td>ANPR engine on board, Third party OCR optional</td>
</tr>
<tr>
<td>Capture Rate</td>
<td>75 fps</td>
</tr>
<tr>
<td>Classification</td>
<td>Optional</td>
</tr>
<tr>
<td>Vehicle Color</td>
<td>Optional</td>
</tr>
<tr>
<td>Vehicle Brand</td>
<td>Optional</td>
</tr>
<tr>
<td>Vehicle Model</td>
<td>Optional</td>
</tr>
<tr>
<td>AES256</td>
<td>Yes</td>
</tr>
<tr>
<td>SHA2</td>
<td>Yes</td>
</tr>
<tr>
<td>Compression</td>
<td>JPG</td>
</tr>
<tr>
<td>Streaming</td>
<td>Video streaming via standard RTSP protocol</td>
</tr>
<tr>
<td>Configuration</td>
<td>Web Server: Installation and configuration by Web Server on board, TCP/IP Server: Configuration and monitoring through TCP/IP protocol. (SDK provided)</td>
</tr>
<tr>
<td>Data Transmission</td>
<td>FTP (Client to FTP Server mode for remote data transmission; Multiple FTP servers addressable), TCP/IP (open protocol; (SDK provided), Standard protocols: XML; SNMP; NTCIP; DATEX2; UTMC; ONVIF; MODBUS</td>
</tr>
<tr>
<td>Serial Port</td>
<td>Insulated RS485</td>
</tr>
<tr>
<td>Operating System</td>
<td>Linux Operating System</td>
</tr>
<tr>
<td>Digital i/o</td>
<td>6 Optoisolated input - 4 Relay Output – 1 Strobe output</td>
</tr>
<tr>
<td>Connectors</td>
<td>Waterproof circular connector</td>
</tr>
<tr>
<td>IP Protection</td>
<td>Waterproof IP68</td>
</tr>
<tr>
<td>Ethernet</td>
<td>GigaBit Ethernet 10/100/1000</td>
</tr>
<tr>
<td>Storage</td>
<td>uSD up to 128 GB, Optional HD/SSD</td>
</tr>
<tr>
<td>GPS</td>
<td>Yes</td>
</tr>
<tr>
<td>LTE</td>
<td>Optional</td>
</tr>
<tr>
<td>WiFi (Easinstall)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Part Numbers

<table>
<thead>
<tr>
<th>Product</th>
<th>Part Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vega Smart Traffic Light</td>
<td>F01764</td>
</tr>
<tr>
<td>Smart Traffic Light</td>
<td>F01769</td>
</tr>
<tr>
<td>Smart Traffic Light Non Reflective Plates</td>
<td>F01750</td>
</tr>
</tbody>
</table>

www.tattle.com
Vega Basic Family

Mainly targeted to stop & go tolling, parking and access control systems, with a maximum input power of 13W, the Vega Basic line offers 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
- Stand alone: thanks to local buffering of information, the system is able to function also in case of disruption in the data connection
- 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

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

<table>
<thead>
<tr>
<th>Feature</th>
<th>Vega Basic Short range</th>
<th>Vega Basic Long range</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multicore Processor</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>OCR License</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>OCR Color sensor (pale coloring)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Context color sensor</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Video streaming</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Micro SD</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Linux Os</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>OCR</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Kemler/ADR recognition</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Autoiris</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Easinstall App</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Speed Estimation</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Model Recognition</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Class Recognition</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Brand Recognition</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Color Recognition</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Incl. = Included / Opt. = Optional

A multicore processor on board with Linux operating system
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 Vega1 is compact, easy to install and does not require an external IR lighting. The extra compact case reduces installation impact.

**Applications:**
- Single lane road tracking
- Surveillance and access control
- Congestion charge
- Limited traffic areas, priority lanes

**Optional functionalities:**
- GPS
- Vehicle class
- LTE
- Vehicle color
- Vehicle model
- Limitation on vehicle speed
- Vehicle size (length, width, height)
- Vehicle type (car, bus, truck, etc.)
- Vehicle number
- Vehicle model
- Vehicle brand

**Technical Data**
- **Operating & Storage**
  - Temperature: From -40° to +60° C
  - 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)

**Part Numbers**
- **Vega 1**
  - F01870
- **Vega 1 Long Range**
  - F01872
- **Vega 1 Short Range**
  - F01871
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
- **Lane Detected**: 1
- **Max Vehicle Speed [km/h]**: 70
- **Working Distance [m]**: up to 8
- **Detection**: 99%
- **Reading**: >95%
- **OCR**: ANPR engine on board
- **Capture rate**: Up to 60 fps
- **AES256**: Yes
- **SHA2**: Yes
- **Compression**: JPG
- **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.
- **FTP**: FTP Client to FTP Server mode for remote data transmission; Multiple IP servers addressable
- **TCP/IP**: Tattile TCP/IP open protocol; (SDK provided)
- **Wiegand**: Yes
- **Standard protocols**: XML; SNMP; NTCIP; DATEX2; UTMC; MODBUS
- **Serial Port**: Insulated RS485
- **Operating & Storage**
  - **Temperature**: From -40° to +60° C
  - **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)

### BASIC LONG RANGE
- **Lane Detected**: 1
- **Max Vehicle Speed [km/h]**: 150
- **Working Distance [m]**: up to 25
- **Detection**: 99%
- **Reading**: >95%
- **OCR**: ANPR engine on board
- **Capture rate**: Up to 60 fps
- **AES256**: Yes
- **SHA2**: Yes
- **Compression**: JPG
- **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.
- **FTP**: FTP Client to FTP Server mode for remote data transmission; Multiple IP servers addressable
- **TCP/IP**: Tattile TCP/IP open protocol; (SDK provided)
- **Wiegand**: Yes
- **Standard protocols**: XML; SNMP; NTCIP; DATEX2; UTMC; MODBUS
- **Serial Port**: Insulated RS485
- **Operating & Storage**
  - **Temperature**: From -40° to +60° C
  - **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)

### Part Numbers
- **Vega Basic Color Short Range**: F01751
- **Vega Basic Color Long Range**: F01753
- **Vega Basic Short Range**: F01750
- **Vega Basic Long Range**: F01752

---

**Vega Basic Short Range - Long Range**

**Automatic Number Plate Reader**

**Parking Access Control - Stop & Go Tolling**

**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
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

Software Features

<table>
<thead>
<tr>
<th>Anpr Mobile</th>
<th>Software Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licence Plate Recognition</td>
<td>Anpr Engine on board</td>
</tr>
<tr>
<td>OCR</td>
<td>Anpr engine on board</td>
</tr>
<tr>
<td>Configuration</td>
<td>TCP/IP server</td>
</tr>
<tr>
<td>Web Server</td>
<td>Installation and configuration by web server on board</td>
</tr>
<tr>
<td>TCP/IP Server</td>
<td>Configuration and monitoring through TCP/IP protocol</td>
</tr>
<tr>
<td>Data and Time</td>
<td>Synchronization via SNTP protocol or GPS</td>
</tr>
<tr>
<td>Software Update</td>
<td>Upgrading via web interface and SDK</td>
</tr>
<tr>
<td>FTP Server</td>
<td>FTP Client to FTP Server mode for remote data transmission, two IP address management</td>
</tr>
<tr>
<td>TCP/IP Operating System</td>
<td>Linux</td>
</tr>
<tr>
<td>Streaming</td>
<td>Video streaming via standard RTSP protocol</td>
</tr>
<tr>
<td>Operating Mode</td>
<td>Continuous processing with automatic plate detection</td>
</tr>
</tbody>
</table>

Technical Data

<table>
<thead>
<tr>
<th>Anpr Mobile</th>
<th>Technical Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>System</td>
<td>ANPR Mobile</td>
</tr>
<tr>
<td>ANPR camera</td>
<td>1920 x 1080-Monochrome CMOS sensor</td>
</tr>
<tr>
<td>Context camera</td>
<td>1920 x 1080-Color CMOS sensor</td>
</tr>
<tr>
<td>Illuminator</td>
<td>850nm High power infrared</td>
</tr>
<tr>
<td>Duration range</td>
<td>6 LEDs High power infrared</td>
</tr>
<tr>
<td>Lens</td>
<td>6 Mirrors, Many focal length available</td>
</tr>
<tr>
<td>Operating System</td>
<td>Linux</td>
</tr>
<tr>
<td>Storage</td>
<td>Up to 128 GB</td>
</tr>
<tr>
<td>Network</td>
<td>Fast Ethernet 10/100 and WiFi 802.11 b/g/n</td>
</tr>
<tr>
<td>Temperature</td>
<td>From -30° to +60° C</td>
</tr>
<tr>
<td>Humidity</td>
<td>Up to 95% non-condensing</td>
</tr>
<tr>
<td>Dimensions</td>
<td>178 x 76 x 141 mm (WxHxL)</td>
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<tr>
<td>Weight</td>
<td>1,650 Kg</td>
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<tr>
<td>Operating &amp; Storage</td>
<td>Waterproof IP66/IP67</td>
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<tr>
<td>Power supply voltage</td>
<td>12 Vdc</td>
</tr>
<tr>
<td>Power consumption</td>
<td>15 W</td>
</tr>
</tbody>
</table>

Part Numbers

<table>
<thead>
<tr>
<th>Anpr Mobile</th>
<th>Part Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANPR Mobile</td>
<td>ANPRMOBILE10114 short range</td>
</tr>
<tr>
<td>ANPR Mobile</td>
<td>ANPRMOBM1105 medium range</td>
</tr>
<tr>
<td>ANPR Mobile</td>
<td>ANPRMOBM1106 long range</td>
</tr>
</tbody>
</table>