

# InnoWare

Technologies

●●● Beyond LPR



## InnoTraffic

High-performance, cost-effective, intelligent LPR  
for Free Flow applications

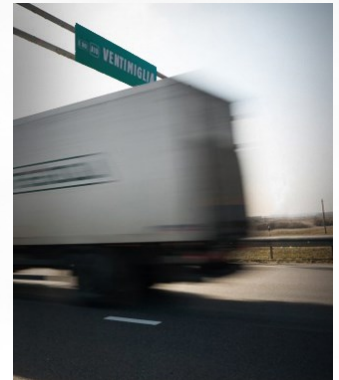
InnoTraffic is a complete LPR suite for free flowing traffic environments: wherever vehicles move at high(er) speeds or in lesser controlled flows, InnoTraffic is the perfect application for License Plate Recognition.

### **Basic Features**

- Detection up to 230kph
- Works in WAN and stand-alone
- ISO certified (Class A 100%)
- Detection within 20ms
- Virtual Tripwire Plugin
- Export Data Protection
- Event Retrieval Tool
- Traffic Light Management Plugin
- Traffic Management Algorithm
- Live Database Synchronizing
- GPS plugin
- Advanced VCA Interfacing

### **Applications**

- LTZ – Zone Entry Control
- Red Light Enforcement
- Speed Enforcement
- Lane Use Violation
- Stationing Violation
- Traffic Management
- Traffic Statistics



### **Competitive Advantages**

- Hardware Neutral
- Camera Independent
- Modularly Structured
- Plate Independent
- ONVIF Compatible
- Extreme CPU efficiency

### **Customer Benefits**

- Reduced investment requirements
- Usable in any configuration
- Ability to re-use existing front-end
- Reduce congestions
- Avoid unauthorized footage access
- Simplified (fast) set-up and deployment



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## Specifications

Hardware Requirements	2 CPU cores (physical or virtual) - 1.8 GHz - 1 GB of RAM per lane
Supported Video Sources	Any RTSP enabled IP camera - H264 and MJPEG
Supported Proprietary Streaming Protocols	Axis - IndigoVision - Basler
Operating System	Windows 32/64 bit (LPR engine & Application Interface) - Linux (LPR engine)
Application Language	English, Italian (translation ready)
Supported License Plates	Arabic Characters - Font Independent - Country Independent - Plate Independent
Supported Generic I/O Devices	USB - Based, Wiegand Compliant, Serial Ports
Supported Proprietary I/O Devices	Neosys - IndigoVision
Recognition Triggering	Motion Detection - Virtual Tripwire - External Devices
Image Storage	Plate Image - Overview Images (pre and post recognition)
Managed Events	Plates in Black/White Lists, LTZ Authorization, Traffic Light Status, Speed Limit, Reserved Lanes
Third Party Integration	VMS - PSIM
Project Configuration	Locally and Remotely
Supported Database	SQL Server (2005 and up)
Supported Database Structure	Local and Remote
Output Actions	Set Alarm & Bookmarks - Start Recording - Drive Barrier, Messaging Panels - Start Audio Messages
Output Data	License Plate Number - Site Name - Lane Name - Detected Event Code

Subject to change without notice - Contact us for more information

## About InnoWare

InnoWare is an Italian developer of proven, modular, multi-purpose License Plate Recognition suites. InnoWare helps its private and public customers automatically manage and control their infrastructure, small or large, single- or multi-site, whether moving objects are cars, trucks or other, moving at low or high speeds, and whether systems need be deployed integrated or stand-alone, using new or existing products.

## InnoVis Traffic Eye2<sup>(\*)</sup>



## Technical features<sup>(\*)</sup>

The Automatic License Plate Recognition camera “InnoVis Traffic Eye” is made by the following items:

### **Licence Plate Camera**

Basler acA (ACE) 2500 -60gm USB 3.0 B/W sensor 1” CMOS 2592 x 2048 pixels -60 frame/sec.  
Continuous or trigger based capturing.

### **Overview Camera (optional)**

Basler Bip2-1920c-dn - day/night color sensor CMOS - 1920 x 1080 pixels - 30 frame/sec - ONVIF

### **Integrated Illuminator**

Hi-Power IR-850nm LEDs  
Pulsed power: up to 600 W  
Distance: 25 m.  
Beam angle: 10 degrees  
Pulse width: 0.1 to 2.5 msec , Up to 500 pulses/sec.

### **Lenses**

HR 1” with IR filter (for the LPR camera).  
Focal length : 16, 25, 35 mm – F1.4

### **License Plates Recognition Software**

InnoWare’s InnoTraffic.

### **Processing Unit**

Fanless industrial SBC:

- CPU: Intel Core i7-6660U
- RAM: 4 GB
- HD: 128 GB SSD M-SATA3
- 1 Gigabit Ethernet port
- 2 USB 2.0 ports
- 2 USB 3.0 ports
- 2 COM - RS232 ports

(\*) Specifications and housing’s layout can change without notice.

## Functional description

The cameras are connected via a network cable to the internal processing unit. The processing unit performs image acquisition, which may be both continuous or trigger initiated. In both cases, the acquisition is synchronized with the pulsed illuminator that emits in the near-infrared spectrum.

The duration of the light pulse and the radiant power emitted can be set at factory.

The Innovis LPR software performs the recognition, using the images received by the processing unit. The result of processing (plate code and other transit related data) and the images can be stored locally and/or sent over the network to a central storage and control unit.

## Application Fields

The device is designed for use on highways or suburban and city roads.

Depending on the kind of installation, there are three different classes of shooting geometries that, fixed the tilt of the camera from the road, can be obtained by using different focal length lenses:

Highways: camera height on the way from 5 to 7 m approx. -Focal length: from 50 to 75 mm

Suburban: camera height on the road from 3 to 5 m approx. -Focal length: from 25 to 35 mm

Urban: camera height on the road from 3 to 1 m approx. Focal length: 8 to 16 mm

