



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)



▶ 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 Optionals

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

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 Performance		
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	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; Multiple IP servers addressable	
TCP/IP	Tattile TCP/IP open protocol; (SDK provided)	
Standard protocols	XML; SNMP; NTCIP; DATEX2; UTMIC; 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 MPX BW 5 MPx Color (Color Version)	
Context camera	NA	2.3 Megapixel color CMOS sensor
Illuminator	12 high power 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 Optional HD/SSD	
GPS	Optional	
LTE	Optional	
WiFi (Easinstall)	Yes	
Technical Datas		
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)	

Part Numbers

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

Vega Smart 2HD	
F01761	Smart 2HD
F01768	Smart 2HD Non Reflective Plates

Vega Smart Color HD	
F01762	Smart Color HD

Vega Smart Color 2HD	
F01765	Smart Color 2HD

