Smart Family

Scalable hardware
architecture
to meet
increasing
workloads

- Embedded multicore processors

- LTE and GPS available as optionals

- SSD from 128GB up to 1TB according to customer needs

- Smart design

- IP68 protection grade

- Extended temperature range (-40°/+ 60°C | -40°/+140°F external temperature)

- The hardware system has been designed using a modular approach 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.

- Modular architecture allows easy customization of the HW platform according to the complexity of the application.

- Devices able to detect and read non-reflective license 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).

Smart 2HD

Next-generation Tattile ITS system pushes limits from ANPR to the true vehicle identification

- The Smart 2HD is built on a high-performance base allowing high scalability for high-end, multivehicle per second and multiple lane applications.

- With embedded license plate recognition, image analysis software, high-resolution sensors, low power consumption and a web server on-board, the Smart2HD camera allows performing innovative applications.

- The camera can be integrated and 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 axle information.

- The local buffering system and optional local storage let the system work even in case of disruption of data connection, providing safe temporary storage and automatic retrieval of stored data.

- The user can optionally run its software within the Container in the camera itself, expanding integration and communication capabilities to any need.

	SMART HD	SMART 2HD
Software features and Performance		
Lane Detected	2	
Max Vehicle Speed	250 km/h - *155 mph*	
Working Distance	Up to 35 m - *Up to 115 ft*	
Detection	99%	
Reading	>95%	
OCR	ANPR (ALPR) engine on board	
Third party OCR	optional	
Capture rate	Up to 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; 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 (ALPR) 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	
Technical Data		
Operating & Storage Temperature	From -40° to +60° C - *From -40° to +140° F*	
Operating & Storage Humidity	Up to 95% non condensing	
Dimensions	290 x 127 x 235 mm - *11.4 x 5 x 9.25 in* (WxHxL)	
Weight	5.5 kg - *12.12 lbs*	
Power supply voltage	24 Vdc	
Power consumption	50 W (max)	

Part Numbers

Smart HD	
F01760	Smart HD
F01767	Smart HD Non Reflective Plates

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

Smart Color HD	
F01762	Smart Color HD

Smart Color 2HD	
F01765	Smart Color 2HD