



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).



TRAFFIC LIGHT ENFORCEMENT

Smart Traffic Light

The new concept of red-light enforcement cameras, entirely based on image analysis

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 available for:
 - Red light enforcement
 - Tax and insurance control
 - Vehicle tracking
 - Traffic monitoring

	SMART TRAFFIC LIGHT
Software features and Performance	
Lane Detected	2
Max Vehicle Speed	250 km/h - 155 mph
Working Distance	Up to 25 m - Up to 82 ft
Detection	99%
Reading	>95%
OCR	ANPR (ALPR) engine on board
Third party OCR	optional
Capture rate	Up to 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; UTMIC; 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 (ALPR) 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
Technical	
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 Traffic Light	
F01764	Smart Traffic Light
F01769	Smart Traffic Light Non Reflective Plates