



ITSCAM 600

ITSCAM 600 is a capture and image processing device that performs identification of license plates (LPR), through Optical Character Recognition (OCR). The equipment is open platform and lets you embed third-party applications. Therefore, ITSCAM 600 reduces the need of additional equipment on edge processing. The ability to process Pumatronix' Analytics plus mobile connectivity results in a smart camera for Surveillance, Monitoring and Security.

FEATURES

- Motorized 13-55mm lens or CS mount
- Auto iris (support for DC and P-IRIS models with automatic detection)
- H.264* and MJPEG encoder
- Wi-Fi/4G/3G connectivity with external antennas
- GPS and Gigabit Ethernet
- eSIM module for cellular communication
- Digital signature

APPLICATIONS

Electronic Traffic Inspection: Speeding violation, red light traffic violation, and no-drive day violation

Electronic Toll Collection: Toll avoidance control and vehicle count by class

Parking and Access: Vehicle identification in closed environments and public roads

Urban Mobility: Statistics for traffic synchronization and vehicle counting

Logistics: Optical Character Recognition (OCR) for ISO container and RFFSA train codes

Monitoring and Security: Statistics for traffic synchronization and vehicle counting



BENEFITS

- High processing power (Xilinx Zynq® Ultrascale+™ EV MPSoC)
- Embedded software using Docker®
- Secure Global Platform Environment (Trusted Execution Environment)
- Neural Network Accelerator (NPU) compatible with Tensorflow® and Caffe®*
- Georeferenced image
- FCC and CE Compliance in progress
- Anatel

*Functionality coming soon

TECHNICAL SPECIFICATION

MODEL	Traffic Control Device ITSCAM 600 CS	Traffic Control Device ITSCAM 600 ML	Traffic Control Device ITSCAM 600 CS DS IOT EXT ANT	Traffic Control Device ITSCAM 600 ML DS IOT EXT ANT
IMAGE FEATURES				
Lens	CSMount ¹	Pumatronix 13-55mm	CSMount ¹	Pumatronix 13-55mm
Resolution	1636 x 1220 px			
Sensor size	1/1.8"			
Capture system	Global shutter			
Shutter	1/12500 (80µs) ~ 1/15.6 (64ms)			
Imagem sensor type	CCD			
Internal frame rate	15fps			
Transmission frame rate	Up to 15fps			
¹ Consult available options				
ELECTRIC INTERFACE				
Power Supply	9~32Vdc			
PoE (Power over Ethernet)	IEEE 802.3af			
Connectors	2 Ethernet, USB A 2.0, Microfit 16 pins, SIM Card slot, MicroSD slot, auto iris, and SMA (models with external antennas for 3G, 4G, Wi-Fi, GPS)			
Energy Consumption	7~12W		8.5~12W	
MECHANICAL INTERFACE				
Weight	² 535g	835g	² 575g	875g
Size (WxHxD)	³ 77x76x120mm	77x76x187mm	³ 77x76x120mm	77x76x187mm
IP protection	IP40			
Operating temperature	-10°C~65°C with relative humidity of 5~95% and without condensation (tested as IEC 60068-2-2)			
Fixing	2 screws 1/4"			
Material	Anodized aluminum and polycarbonate front panel			
² Product weight without lens. Recommended lens for most applications (Pumatronix 8-40mm) weights 340g. ³ Lens size not included				
LOGICAL INTERFACE				
Input/Output	4 individually programmable bidirectional digital opto-isolated inputs or outputs for: trigger signal connection, ITSLUX triggering and integration with other devices such as alarms, and gates			
Network interface	2 network interfaces 10/100/1000Mbps (Gigabit)			
Image format	JPEG			
Video format	H.264 ⁴ , H.265 ⁴ , and MJPEG			
Communication protocols	FTP and Pumatronix			
API (Application Programming Interface)	REST			
External storage	MicroSD up to 128GB (not included)			
RAM memory	2GB LPDDR4 (2100Mbps @ 1050Hz)			
GENERAL				
Embedded license plate recognition ³	Yes			
Camera profiles	4 configurable profiles			
Multiple exposures	2~8 captures per requisition with different image settings			
HDR (High Dynamic Range)	Pumatronix' HDR			
⁴ Check availability				
COMMUNICATION				
GPS	Not applicable	Qualcomm® IZat™ Gen8C Lite Multi-constellation Glonass, BeiDou/Compass, Galileo e QZSS (typical external antenna 2 dBic)		
Wi-Fi	Not applicable	IEEE 802.11 bands b/g/n 2.4GHz (typical external antenna 2.8dBi)		
4G/3G	Not applicable	LTE-FDD/LTE-TDD/WCDMA/GSM (external antenna 1.42dBi, 1.91dBi, 2.51dBi, 3.23dBi, and 2.89dBi)		
PROCESSING				
SoC Zynq UltraScale+ EV	Quad-core ARM™ A53 (1.2GHz, ARMv8 and NEON support)			
Embedded Software	ITSCAM 600 allows software loading through Docker containers REST API provides image capture functions and access to Pumatronix analytics ⁵			
⁵ SDK and application examples will be available at feature launch Product manual contains the technical standards met by ITSCAM 600				