

IMAGE CAPTURE

ITSCAM 401, ITSCAM HDR



ITSCAM, QUALITY AND PRECISION

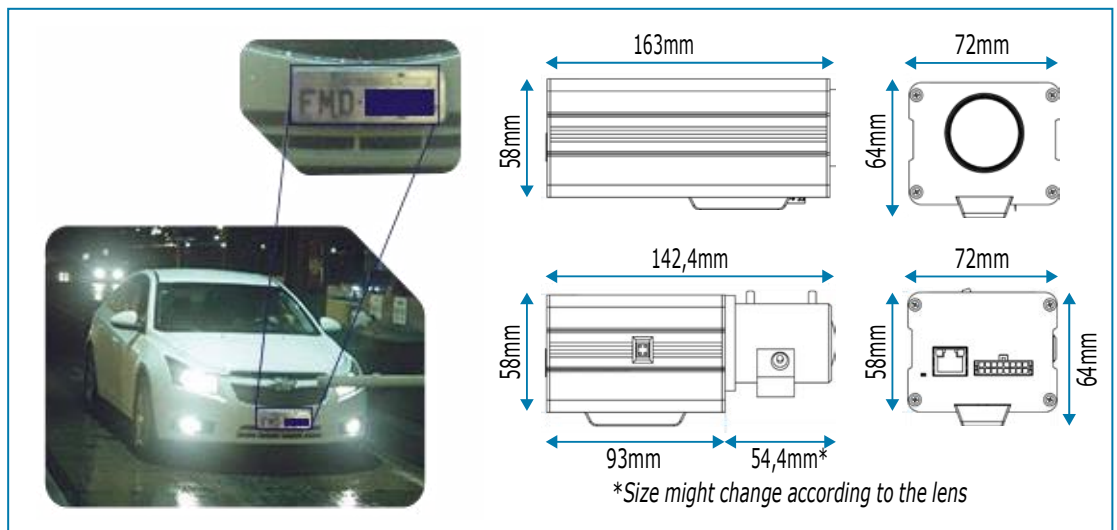
The ITSCAM line consists of intelligent digital image capture and processing devices, specifically for applications that involve recording vehicles or objects, even when they are in motion.

The line offers high-quality image capture for identification of vehicle license plates, container and railway wagon codes, and it can also be used for other types of vehicles or objects. It can be triggered by physical or virtual signal, as well as flash synchronization, with total control brightness control.

Lenses are a key component of any image capture equipment, which is why we use high-quality, high-precision models.

USES

- Traffic enforcement
- Truck scales
- Port terminals
- Fleet logistics
- Toll road operators
- Smart cities



MAIN FEATURES

- Open configuration and communication protocol
- Triggered by software or physical sensors
- Smart camera with motion detection option
- Perfect for capturing images at low and high speed
- IP communication with optional PoE powersupply
- Models with motorized or fixed lens
- Innovative PUMATRONIX HDR technology
- Configurable image resolution: from 160 x 120 up to 1280 x 960
- Digital signature (optional)
- Support for Wiegand protocol

TECHNICAL SPECIFICATIONS

401 Models	HDR Model
Operates with PUMATRONIX multi-exposure technology, allowing for recording multiple images with a single shot, increasing the license plate identification rate in night mode.	Captures images with the PUMATRONIX HDR feature, to show the vehicle and license plate characteristics in a single image.

Lenses	
CS or C-mount lenses, compatible with ITSCAM	Infrared (IR) corrected lenses
Zoom lenses	High resolution lenses
Manual or motorized zoom and focus	Wide-aperture lenses

Model	Resolution	Lens	Frame rate (internal/transmission)	Minimum shutter speed	Options
401	752 x 480, 1/3" D/N	Motorized,	60 fps/35 fps	1/29550	OCR/LPR, PoE, Digital Signature, GPS, RTC Clock
HDR	1280 x 960, 1/3" D/N	Manual	30 fps	1/29078	

Image capture system	Progressive Scan - Global Shutter
File formats generated	BMP, JPEG or MJPEG
Communication interface	10/100 MB Ethernet
Supported protocols	TCP/IP, HTTP, FTP, NTP and RTSP
Inputs and outputs	<ul style="list-style-type: none"> • 1 x RJ45 (10/100 Ethernet) • 2 x Serial RS232 • 2 x Optically isolated TTL inputs • 2 x Optically isolated TTL outputs • 1 x DC power input
Supported trigger	Physical and Virtual
Power supply voltage	9 to 25 VDC
Maximum consumption	5W
Operating temperature	-10 °C to 70 °C
Material	Aluminum profile with electrostatic paint
Dimensions	Manual Lens: 72 x 64 x 93 mm + lens Motorized Lens: 72 x 64 x 163 mm
Weight	Manual Lens: 250 g + lens Motorized Lens: 400 g
Options	OCR/LPR, PoE, Digital Signature, GPS, RTC Clock

Model	Manufacturer	Feature
SL183	Theia	1.8-3mm, ideal for short distance, such as container identification
SL940A	Theia	9-40mm, ideal for vehicle identification from up to 20 meters away
TV7X7513D	Senko	7.5-50mm, ideal for vehicle identification from up to 25 meters away at non-megapixel resolutions
MTV3X2812D	Senko	2.8-9mm (3 MP), efficient for recording panoramic images
TV4X2812D	Senko	2.8-12mm, for distances of up to 6 meters in vehicle identification or for capturing panoramic images

Data management	
Average daytime image size*	[A] 60KB
Average nighttime image size*	[B] 45KB

Estimated server storage calculation		
	ITSCAM401	ITSCAM HDR
Number of cameras	[C] 1	[C] 1
Number of Daytime exposures	[G] 4	[G] 1 (FIXED)
Number of Nighttime exposures	[H] 2	[H] 2
Daytime VDM (Daily Vehicle Average)	[D] 1200	[D] 1200
Nighttime VDM (Daily Vehicle Average)	[E] 800	[E] 800
Number of days for storage	[F] 30	[F] 30
Necessary disk space	$C \times [(G \times D \times A) + (H \times E \times B)] \times F$ 1 [camera] x [(4 x 1200 x 60) + (2 x 800 x 45)] x 30 10.800.000 KB, 10.547 MB or 10.3 GB	$C \times [(D \times A) + (E \times B)] \times F$ 1 [camera] x [(1200 x 60) + (800 x 45)] x 30 3.240.000 KB, 3.165 MB or 3.1 GB