

SmartCAM

INTELLIGENT ALL-IN-ONE CAMERA
WITH BUILT-IN ANPR SOFTWARE & SDK



OCR RESULTS:



- NUMBER PLATE: ARH 001
- VEHICLE TYPE: MERCEDES BENZ
- NATIONALITY: EU-HUNGARY
- SPEED: 158 MPH / 254 KMH
- BLACKLIST: --- NO ---
- COLOR: BLUE METAL
- OWNER: ZSOLT VANYI

OCR RESULTS:



- NUMBER PLATE: 06G 437
- VEHICLE TYPE: VOLVO V40
- NATIONALITY: USA-IOWA
- SPEED: 62 MPH / 100 KMH
- BLACKLIST: --- NO ---
- COLOR: WHITE
- OWNER: COLMANN JOHN

SMART TRAFFIC CAMERA WITH ONBOARD ANPR

This cost-effective third generation ANPR camera combines high quality imaging with onboard plate recognition. In some models of the SmartCAM family the dual sensor dual lens design serves as an Overview camera, in others it functions to further enhance number plate recognition accuracy.

Thanks to the 5 pre-installed fully functional plate recognition engines, this camera effectively covers all known plate types. SmartCAM recognizes plates very fast, partly because of parallel multi-core operation, partly due to an integrated vehicle detection algorithm that preselects the relevant images for the ANPR module. Perfect imaging is assisted by built-in smart illumination that also has a synchronized flash mode for recognizing reflective and non-reflective number plates simultaneously. It is a true stand-alone traffic solution. SmartCAM's advanced technology is protected by a sturdy IK10 & IP67 industrial grade housing.

 TOLL COLLECTION	 JOURNEY TIME MEASUREMENT	 TRAFFIC MONITORING
 ACCESS CONTROL	 TRAFFIC SECURITY MONITORING	 BORDER CONTROL

MAIN BENEFITS

- SmartCAM is a standalone traffic solution: ANPR running inside the camera
- Pre-installed recognition engine to cover license plates worldwide
- Powerful processor and image preselection that guarantee fast operation
- Direct export of ANPR results to database
- Wide range of models from cost-efficient version to cutting-edge technology
- Modular design for optional radar and illumination add-ons
- Trouble-free remote access
- Vehicle make, model and color recognition - more information helps better decisions

TOWARD THE FUTURE IN SAFETY – SINCE 1991

SPECIFICATIONS

SMARTCAM

- 2+4 core processor • on-board ANPR • reads reflective/non-reflective plates • overview lens
- advanced vision lens • video-based vehicle detection trigger • checkpoint for average speed measurement systems
- optional vehicle make, model and color recognition

Production Code	SMARTCAM HDx	SMARTCAM HDx DUAL	SMARTCAM HDx DUAL PLUS	SMARTCAM FHD DUAL PLUS
	SmartCAM-03-6450	SmartCAM-03-6452	SmartCAM-03-6552 (850nm) SmartCAM-03-655A (760nm)	SmartCAM-03-4562

DISTANCE RANGE

Optimal ANPR range at ambient light	4 m – 20 m / 13 ft – 65 ft	10 m – 20 m / 33 ft – 65 ft
Maximum ANPR range at optimal conditions	50 m / 164 ft	40 m / 130 ft

IMAGING

Resolution (H x V pixels): framerate	1440 x 1080: 30FPS 1280 x 720: 60FPS	Main sensor: 1440 x 1080: 30FPS 1280 x 720: 60FPS Second sensor: 1920 x 1080: 30FPS	Sensor1: 2048 x 1536: 20 fps, 1920 x 1080: 30 fps Sensor2: 1280 x 960: 54 fps
Function of the second sensor	–	Overview	Advanced Vision
Day mode / night mode	Light sensor configurable auto-switching day/night mode, automatic brightness control		
High Dynamic Range mode (HDR)	–	Included (Sensor2)	–
Lens	11x, automatic, motorized lens	Main lens: 11x, automatic, motorized lens	Main lens: 3.3x, automatic, motorized lens

ILLUMINATION

Wavelength	850 nm (Infrared)	760 nm or 850 nm (Infrared)	850 nm (Infrared)
Illumination modes	Synchronized flash or continuous		

PROCESSING & I/O

CPU for ANPR	ARM Quad Core 4 x 1GHz	Intel Atom Quad Core 4 x 1.9GHz
Communication protocols	ARP, ICMP, TCP/IP, DHCP, NTP, FTP, HTTP, SMTP, RTP	
4G / GPS	optional	

ELECTRICAL DATA

Power requirement	24-28 V AC
Power consumption typical	11 W
Connectivity	Binder M12 circular: Ethernet (8-pin), Power (4-pin), User (8-pin), User (12-pin)

ON-BOARD INTELLIGENCE

CARMEN® ANPR	Included
Video Analytics (Vehicle Detection, Motion Detection, Private Zones, Vehicle Make, model and color recognition)	Included
Trigger sources	GPIO / UART / Software trigger (controlled via HTTP request) / MotDet / VehDet

MECHANICAL DATA

Operating temperature	-40 °C – 70 °C / -40 °F – 158 °F*
IP & IK rating	IP67 & IK10
Dimensions (without bracket) length x width x height	390 mm x 167 mm x 155 mm (15.4" x 6.6" x 6.1")
Weight (without bracket)	4.6 kg / 10.1 lbs
In the box	Camera with data cable, power cable, bracket, shield.



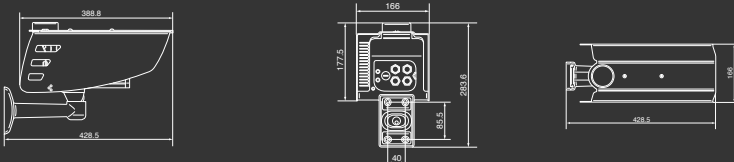
RADAR (OPTIONAL)

Measurement Principle	Doppler-Radar
Measurement Frequency	24.165 GHz

OPTIONAL ACCESSORIES

I/O cables, FreewayCAM RAD-AR Trigger, FreewayCAM IR-LIGHT 3, Junction box

*internal temperature / ambient temperature: max. 55 °C (131 °F)



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