SmartCAM

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

OCR RESULTS:

OGG 437

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

OCR RESULTS:

ARH 001

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

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
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

TOWARD THE FUTURE IN SAFETY – SINCE 1991

SPECIFICATIONS

• 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

Production Code	SMARTCAM HDx SmartCAM-03-6450	SMARTCAM HDx DUAL SmartCAM-03-6452	SMARTCAM HDx DUAL PLUS SmartCAM-03-6552 (850nm)	SMARTCAM FHD DUAL PLUS 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 × V pixels): framerate	1440 × 1080: 30FPS 1280 × 720: 60FPS	Main sensor: 1440 × 1080: 30FPS 1280 × 720: 60FPS Second sensor: 1920 × 1080: 30FPS		Sensor1: 2048 × 1536: 20 fps, 1920 × 1080: 30 fps Sensor2: 1280 × 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	11×, automatic, motorized lens	Main lens: 11×, automatic, motorized lens		Main lens: 3.3×, 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 × 1GHz		Intel Atom Quad Core 4 × 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)	Included
Trigger sources	GPIO / UART / Software trigger (controlled via HTTP request) / MotDet / VehDet

MECHANICAL DATA

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Operating temperature	-40 °C – 70 °C / -40 °F – 158 °F*
IP & IK rating	IP67 & IK10
Dimensions (without bracket) length × width × height	390 mm × 167 mm × 155 mm (15.4" × 6.6" × 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

** available as an OEM product, *internal temperature / ambient temperature: max. 55 °C (131 °F)

Technical specifications are subject to change without prior notice. This document does not constitute an offer.
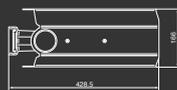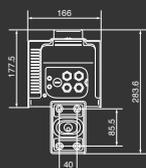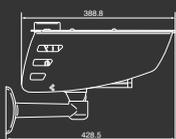
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