



SMARTCAM ANPR CAMERA

The **smartest** one amongst ANPR cameras.



What differentiates SmartCAM from other ANPR cameras is how it connects all ANPR-related functions – that are often missing in traffic cameras or have to be sourced by different vendors. Unlike those, this traffic monitoring camera offers an all-in-one solution for 3 functions: triggering, imaging and ANPR – all these in perfect collaboration, so system integrators get a complete ANPR solution that lets them build traffic systems in a straightforward way.

SmartCAM runs an integrated AI feature for detecting all approaching vehicles: as a result, there is no need for external triggers and the system has no missed events. The soul of this traffic camera is the Carmen recognition engine, the industry-praised ANPR solution – that is now part of the device.

Its smartness appears in the dual lens system as well, a clever imaging feature for enhancing ANPR results and providing a secondary overview footage too.



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
- Region specific engines 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

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 • optional vehicle make, model and color recognition (MMR) • region-specific CARMEN ANPR engines

| 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, SFTP, HTTPS | | | |
| 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 (VehDet), Motion Detection (MotDet), Virtual Loop Trigger, Private Zones, Vehicle Make and Model and Color recognition | | | |
| 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)

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