



FREEWAYCAM ANPR CAMERA

Does ANPR recognition rate matter in your traffic project?



In our nearly 30 years of ANPR experience, it became clear that some myths surround this niche industry. And in most cases, the reason why an ANPR system does not work as expected, lies in these myths and misbeliefs. The FreewayCAM ANPR camera is designed by license plate recognition experts who are aware of all those important technical nuances such a system involves.

They know the best image resolution for ANPR, the speed / shutter time relation, the tricks to avoid blurred images, over-exposure or low contrast capturing – all the ins and outs of ANPR, which resulted in a truly advanced number plate recognition camera: a real workhorse of traffic systems.

This traffic monitoring camera will capture plates up to 255 km/h and uses the revolutionary Advanced Vision technology that makes sure to only proper images are captured in any light conditions and the unique Vehicle Detection for onboard triggering. ANPR will become a smooth job in any weather and temperature, thanks to the IP67-protected design.



Main benefits

- Unparalleled image capturing performance for LPR
- Glare-free / shadow-free image with the Advance Vision second camera module
- No lost events – thanks to the camera's integrated, image-based Vehicle Detection (VehDet) and Virtual Loop Trigger technology
- Auto-setup function
- IK-10 & IP 67 rating

Specifications

- Optimized for Carmen® • Image-based VehDet algorithm • Advanced Vision • Glare-free and Shadow-free ANPR images
- Auto brightness control • HTTPs remote web access • 8 parallel output streams with variable compression, FPS and resolution
- NTP for precise time stamps • ONVIF compliant • Virtual Loop Trigger technology

Production Code **FreewayCAM HDx**

FreewayCAM-03-6350 (IR850)
FreewayCAM-03-6354 (white)

FreewayCAM FHD DUAL

FreewayCAM-03-4362 (IR850)

Distance range

Optimal ANPR range at ambient light	4 m – 20 m (13 feet – 65 feet)	10 m – 20 m (33 feet – 65 feet)
Maximum ANPR range at optimal conditions	50 m (164 feet)	

Imaging

Resolution (H x V pixels): framerate	Main sensor: 1440 x 1080: 30FPS 1280 x 720: 60FPS	Main sensor: 2048 x 1536: 20FPS 1920 x 1080: 30FPS Second sensor: 1280 x 960: 54FPS
Function of the second sensor	–	Advanced Vision
Day mode / night mode	Light sensor configurable auto-switching day/night mode, automatic brightness control	
High Dynamic Range mode (HDR)	–	
Lens	11x variable zoom, motorized, programmable presets	Camera 1: 3.3x variable zoom, motorized, programmable presets Camera 2: fixed 16 mm

Illumination

Wavelength	760** nm or 850 nm (infrared) or white	850 nm (infrared)
Illumination modes	Synchronized flash or continuous	

Processing & I/O

CPU for ANPR	–	
Communication protocols	ARP, ICMP, TCP/IP, DHCP, NTP, FTP, HTTP, SMTP, RTP, SFTP, HTTPS	
4G / GPS	–	

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	–	
Video Analytics	Detection (VehDet), Motion Detection (MotDet), Virtual Loop Trigger, Private Zones	
Trigger sources	GPIO / UART / Software trigger (controlled via HTTP or HTTPs request)	

Mechanical data

Operating temperature*	-45 °C – 70 °C (-49 °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 (equipped).	

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

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

*internal temperature / ambient temperature: max. 50 °C / 55 °C (122 °F / 131 °F) **optionally available