

SmartCAM

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



ALL-IN-ONE CAMERA WITH INTEGRATED ANPR FOR ANY TRAFFIC SYSTEM

The SmartCAM is an all-in-one digital IP camera, illuminator and integrated computer. The computer is built into the housing together with the IP camera. This allows the camera, itself, to run license plate recognition, container code recognition, USDOT recognition and other databases or applications. The camera's built-in processing unit is an industrial strength computer with its own Linux operating system, which can be also replaced by Windows OS as an option. Above the operating system, the device harbors an embedded web server making it accessible via web browsers. As well as the integrated computer, SmartCAM has an embedded digital signal processor (DSP) for real time image manipulation, correction and enhancement tasks.

KEY FEATURES

- Built-in CPU for ANPR processing
- World leading CARMEN LPR engine included (country-independent)
- Flexible hardware/software integration, with possibility to upload custom applications to the camera
- IP camera with embedded web server, remote access via web browser

MAIN BENEFITS

- Appropriate even for low infrastructure systems; no need for lane controller PC for LPR
- Installing simply: requires standard IP and power connection only
- Offering higher OCR accuracy in number plate recognition based systems
- Capturing high quality images, even of vehicles traveling at speeds up to 255 km/h (158.5 mph)



SPECIFICATIONS

SMARTCAM

IMAGING

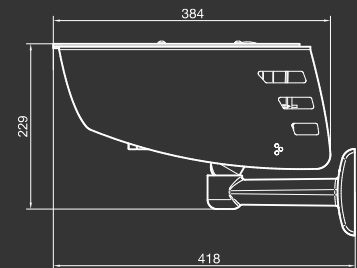
Resolution (H x V pixels)	1280 x 720
Sensor	Color, Progressive scan CCD 1/3"
Max Frame Rate (at all resolution)	30 frames/sec
Exposure Control	Global shutter, software adjustable 1/100 s – 1/30000 s
Output Format	JPEG, MJPEG stream, H.264
JPEG Quality	Adjustable between 10 % – 80 %
Day/Night Mode	Configurable day/night mode switching

LENS

Lens Type	5.2 – 58.8 mm with high precision motorized positioning
Iris	Automatic motorized, programmable
Focus	Automatic motorized, programmable
Zoom	Automatic motorized, programmable
Optical Filter	Switchable: All pass / IR cut above 850 nm
Recommended ANPR Range	3 m – 20 m (10 feet – 65 feet)

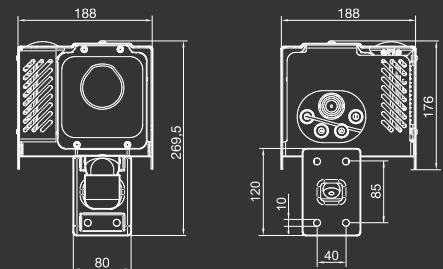
ILLUMINATION

Type	High power IR LED, regulated
IR Wavelength	850 nm
Number of LEDs	8
Intensity	3 preconfigured modes (low, medium, high)
Flash Time	Software adjustable, up to 950 µs
Additional illuminator	Optional



PROCESSING & I/O

CPU	1.6 GHz Intel Atom + N2600
Operating Memory	1GB DDR3
Storage Memory	32 GB
Operating System	Linux 64 bit
ANPR	CARMEN® FreeFlow
Communication Protocol	ARP, ICMP, TCP/IP, DHCP, NTP, FTP, HTTP, SMTP, RTP
Communication Interface	Ethernet, 100 Mbit/sec



RADAR (OPTIONAL)

Measurement principle	Doppler-Radar
Measurement range	0 – 255 km/h (0 – 158.5 mph)
Radar frequency	24.165 GHz, K-Band
Type of detection	Selectable uni- or bidirectional
Installation angle	10° – 25° for official speed measurement
Operating mode	Counting (signed) speed

ELECTRICAL DATA

Input Voltage	24-28 V AC
Basic Power Consumption	14 W
Power Consumption With Heating	33 W
I/O ports	Opto Isolated In/Out, RS232



MECHANICAL DATA

Operating Temperature	-35 °C – 55 °C (-31 °F – 131 °F)
Additional Heating	Optional
Startup Temperature	Over -25 °C (-13 °F)
IP rating	IP67
Dimensions (L x W x H)	440 mm x 188 mm x 269.5 mm (16.46" x 7.40" x 10.61")
Weight (without bracket)	5 kg (11 lbs)
Weight (bracket)	0,6 kg (1.32 lbs)
Housing Material	Aluminum
Housing Color	RAL 9007 / Optional Custom
Shield Color	RAL 9007 / Optional Custom



* internal temperature

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