

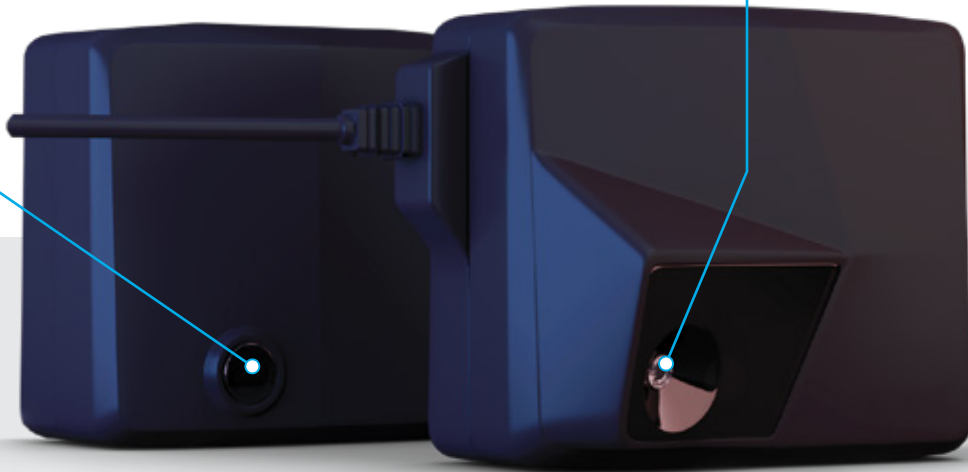
THE VARROC SMART MOBILITY. ALL THE FLEET VISIBILITY REQUIREMENTS ON ONE PLATFORM.



Advanced Driver Assistance Systems (ADAS)



Driver Monitoring Systems (DMS)



OVERVIEW

Presenting VCAM, the industry's 1st Automotive Grade AI-enabled Dual Camera with Video Telematics Solutions. VCAM front camera is enabled with ADAS, capable of identifying unsafe driving instances, alert drivers of potential risks and take corrective action. The VCAM in-cabin sensing camera records the driver's level of awareness to alert them of risky driving behavior.

HIGHLIGHTS

- Automotive grade device designed by the leading manufacturers of automotive parts.
- Clearly captures HD quality exterior and interior footages of the vehicle.
- Automatic uploads of incidents footage, plus on-demand video retrieval.
- Powerful AI Processor.
- Easy to use and install. Quickly integrates with all other platforms.
- Accurately identifies lanes, vehicles, pedestrians, and other objects with Machine Vision and Edge Computing Technology.
- Cloud-based dashboard with reports and trend analysis.

PRODUCT SPECIFICATIONS

CAMERA FEATURES

SoC: Ambarella CV22
Outwards facing camera with OV2775 and 2 MP resolution
Inward/driver facing camera with OV 2311 and IR LED for night vision
Connectivity: LTE, Wi-Fi, and Bluetooth
Integrated Buzzer for audio warnings
Upto 256 GB eMMC based storage

PROCESSOR, GPU AND STORAGE SPECIFICATIONS

GPU	Ambarella CV22
Video Encoding	H264 / H265
Video Format	1920x1080
Sensors	IMU - Accelerometer STM AIS2IH
Storage Memory	32 GB eMMC (Optional upto 256 GB)
RAM	2 GB

CAMERA SPECIFICATIONS

Camera	Internal (DMS)	External (ADAS)
Pixel size	3.0 x 3.0 μm	2.8 x 2.8 μm
Resolution	2 MP	2 MP
Dynamic range	68 dB	120 dB
Responsivity	54000e-/ $\mu\text{W.cm}^2.\text{sec}$ @ 940 nm	26200e-/lux sec @ 530 nm
Lens fitted for sensor size	1/2.9" (OV2311)	1/2.9" (as OV2775)
Lens focal length	5.2 mm	6 mm
Lens F#	2	1,82
Field of view full horizontal	54.9°	51° \pm 3°
Field of view full vertical	44.9°	28.8° \pm 3°
Construction	5 glass plus IR pass filter	6 glass plus IR block filter
Resolution	1600x1280	1920x1080 Full HD

ELECTRICAL SPECIFICATIONS

Input voltage	9-32 V
Input current	1.2 A at 12 V
Max power consumption	15 W
Operating temperature	-20°C to 65°C
Peak current	2 A at 12 V
Peak power	24 W at 12 V
RMS power	1.26 A at 12 V

COMMUNICATION INTERFACES

4G LTE Cat1
Wifi 2.4 GHz, 5 GHz module
Bluetooth 5.2
Embedded Sim

PHYSICAL DIMENSIONS: 136mm x 109mm x 80mm (Width, Height and Breadth)

CUTTING EDGE AI ALGORITHMS FOR SAFETY AND EFFICIENCY.

INWARD CAMERA FEATURES:



Distracted Driver Warning



Drowsy Driver Warning



Cell Phone Usage



Anti Spoofing



Seat Belt Detection

OUTWARD CAMERA FEATURES:



Front Collision Warning



Lane Departure Warning



Tail Gating



Pedestrian Warning

OTHER FEATURES:



Poor Light Conditions



Hard Braking



Speed Limit Warning



Hard Turn



High-G



Hard Acceleration



Driver Hours Tracker



Geo Location



Camera Blockage

MAXIMIZE COACHING, MINIMIZE RISK WITH DRIVER SCORING

Varroc Smart Mobility has developed an intelligent driver coaching system that leverages powerful AI algorithms to analyse patterns and trends in a driver's behaviour, such as harsh braking or speeding. Based on this analysis, It provides real-time coaching by giving feedback through voice prompts or visual alerts. It makes driver coaching more engaging by incorporating gamification elements, such as leader boards, rewards, and badges.

EMPOWERING FLEET MANAGERS WITH VIDEO TELEMATICS.

Efficient fleet management through the power of data.

All the data you need about your driver behavior, vehicle condition and fleet efficiency at your fingertips. Intuitive cloud platform to manage fleets remotely anytime from anywhere.

CLOUD PLATFORM FEATURES:



User Interface



Vehicle Statistics



Device Configuration



Map Overlay



Health Monitor



Driver ID



Ticketing



Recording Manager



Device Interface Communication



Events



Device Management



Fleet Management



Driver Statistics



User Web Page Introduction

