

VEHICLE TELEMATICS VIDEO

VisionAI Enterprise 360

AI-powered video solution
to deliver complete
visibility

VisionAI 360 Enterprise is an advanced multi-camera device which detects risky driving behaviour such as unsigned lane departure, imminent forward collision, unsafe following distance, driver fatigue, distraction, smoking, and mobile phone usage. VisionAI 360 Enterprise uses machine vision-based video analytics technology to detect risky driving behaviours.

The Driver Coach (R-Watch) alerts the driver in real-time if these behaviours are detected using a voice message and visual display. Risky driving behaviour events and related video files are uploaded to Unity – VisionAI360 Application, where Risk Manager for review by fleet managers and drivers to aid them in coaching driver performance.

The VisionAI 360 Enterprise (M1NV2) is able to have 6 cameras connected and further support Dual SIM and boasts a 1 TB SDD.

The VisionAI 360 Enterprise has built-in rich wireless communication capability, supporting 4G/3G high-speed network, WIFI wireless network, and GPS/BDS/GALILEO/GLONASS multi-band quad-constellation global GNSS positioning system at the same time.

Further built-in powerful AI algorithms, can support 2Ch built-in AI, which can fully cover ADAS, DMS & BSD (Blind Side Detection using C46 Camera). Effectively improve driver safety driving and reduce pedestrian-vehicle traffic accidents.

At the same time, VisionAI 360 Enterprise has a strong anti-interference ability of the vehicle environment, the product meets the ISO16750, ISO7637 vehicle test standards, to meet.



Key features



ADAS alerts

Lane Departure Warning (LDW) • Headway Monitoring Warning (HMW) • Forward Collision Warning (FCW) • Rolling Stop.



Driver monitoring

Seat Belt Detection • Smoking Detection • Driver Distraction • Phone Detection • Yawning Detection • Driver Drowsy/Tired • No driver • Camera Out of Alignment • Camera Covered



High Risk Monitoring

• SafeGuard Risk Alarms



Voice prompt notifications



Anti-tamper system that automatically detect tampering



Comprehensive incident capture



AI-driven safety alerts



Designed to Revolutionise Your Fleet Operations

Gain complete control over videos, trip and driver data all in one place with **VisionAI Enterprise 360**, with a full view of your fleet's performance with easy-to view and use dashboards that transform complex data into quick-to-action information to streamline your business.



Real-time location monitoring



Idle time prevention and fuel efficiency insights



Complete compliance monitoring and documentation



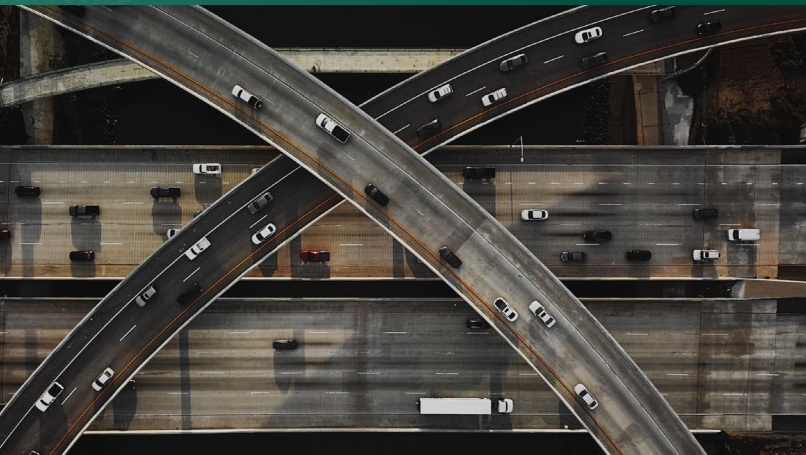
Customisable insight reports for actionable outcomes



Complete video gallery for incident review



Maintenance optimisation to prevent downtime



Technical Specifications

Main Unti (MIN 2.0)

Basic Parameters

RAM	1GB
ROM	8GB
Operating system	Linux TDD-LTE/FDD-LTE/EVDO/TD-SCDMA/WCDMA
3G/4G	Extended support for main and diversity antennas
WIFI	WIFI5 support, 802.11b/g/n/ac compliant (optional)
Localisation	Support GPS/BDS/GALILEO/GLONASS
Storage	Support 2*Micro SD card, Up to 2*512GB Support 1*M.2 SATA SSD, Up to 1*2TB.
Transducers	Supports 6-axis accelerometers

Interface Function

Video input	4Ch AHD + 2Ch IPC (Maximum resolution support 1080P)
Codecs	Full HD real-time full frame encoding with the following encoding capabilities: PAL: 4*1080P@25fps (AHD) + 2*1080P@30fps (IPC) NTSC: 4*1080P@30fps (AHD) + 2*1080P@30fps (IPC)
Video output	1-channel AHD
Audio input	4Ch AHD + 2Ch IPC
Audio output	1Ch
USB	Front Type-A connector USB2.0
Micro SD	2 Micro SD ports
SSD	1*M.2 SATA SSD, Supports heating
SIM Card	1*SIM physical card slot, optional support for digital SIM card eSIM
I/O	8* IN, 2*O
Serial port	2*RS232, 1*RS485
IR	Support

Technical Specifications (cont'd)

AI	Supports built-in 2CH (ADAS, DMS, BSD)
CAN	2*CAN_FD
Speed	Support
Driver Inf. Interface	Support 1CH driver information identification interface, can be docked lbutton

Power Supply

Power Input	DC 9~36V
Power Consumption	Host bare metal power consumption <10W, typical operating power consumption <40W

Physical Characteristics

Dimensions	154*151*52mm
Weights	1.7Kg

Working Environment

Operating temperature	-40°C~+70°C
Storage temperature	-40°C~+85°C

Wi-Fi/Bluetooth Specification (Optional)

Realtek RTL8723DU

Standard	WI-FI: IEEE 802.11 b/g/n (1×1); BT: 2.1/4.2
Frequency	2.402~2.4835GHz
Modulation	DSSS, DBPSK, DQPSK, CCK and OFDM (BPSK/QPSK/16-QAM/64-QAM)

Technical Specifications (cont'd)

Data Rates	11b:1, 2, 5.5 and 11Mbps 11g:6, 9, 12, 18, 24, 36, 48 and 54 Mbps 11n: MCS0~7, up to 150Mbps
Current – Wi-Fi	TX 11b mode: 130mA , RX 11b mode: 90mA
Current – BT	OPP TX: 40mA, OPP RX:24mA

Wi-Fi/Bluetooth Specification (Optional)

Quectel EC25-EC (EMEA/South Korea /Thailand /India)

Device Details		Quectel EC25-EC Cat4 LTE with 3G fallback compatible with 3GPP E-UTRA Release 11 standards
4G	Bands	LTE FDD: B1/ B3/ B7/ B8/ B20/ B28A
	Output Power	Class 3 (23dBm±2dB) for LTE FDD
3G	Bands	WCDMA: B1/B8
	Output Power	Class 3 (24dBm+1/-3dB) for WCDMA
2G	Bands	GSM: B3/B8
	Output Power	Class E2 (27dBm±3dB) for EDGE 850/900MHz Class E2 (26dBm+3/-4dB) for EDGE 1800/1900MHz Class 4 (33dBm±2dB) for GSM 850/900MHz

Quectel EC25-EC (EMEA/South Korea /Thailand /India)

Device Details		Quectel EC25-AU Cat4 LTE with 3G fallback compatible with 3GPP E-UTRA Release 11 standards
4G	Bands	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28 LTE TDD: B40
	Output Power	Class 3 (23dBm±2dB) for LTE FDD Class 3 (23dBm±2dB) for LTE TDD
3G	Bands	WCDMA: B1/B2/B5/B8
	Output Power	Class 3 (24dBm+1/-3dB) for TD-SCDMA Class 3 (24dBm+1/-3dB) for WCDMA

Technical Specifications (cont'd)

2G	Bands	GSM: B2/B3/B5/B8
	Output Power	Class E2 (27dBm±3dB) for EDGE 850/900MHz Class E2 (26dBm+3/-4dB) for EDGE 1800/1900MHz Class 4 (33dBm±2dB) for GSM 850/900MHz Class 1 (30dBm±2dB) for GSM 1800/1900MHz

Driver Coach Display (R-Watch)

Display


Diagonal size (inch)	1.4"
Dimension (L x W)	40*45mm 1.6*1.8"
Resolution	128*128
Brightness	400 cd/m3
Light Sensor	Support
Lens	Glass
Communication	RS485

Other


Buzzer	Built-in
Power Input	5 – 12V DC
IP Rating	IP30

Technical Specifications (cont'd)

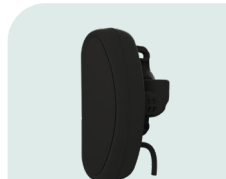
Camera Options




Main Unit




ADAS Camera




Driver Camera



Side Camera



In-cab Camera



Rear Camera

Driver Camera (AI)

Camera Parameters

Model	C29N
Video Output	IPC, 6Pin Aviation connector
Video Resolution – HD	1280H x 800V @ 20 Frames/s
Video Resolution – SD	576p (704 × 576) @ 10 Frames/s
Image Sensor	1/4"100Mp Global Shutter Sensor"
Minimum Illuminance	0.1Lux (infrared light filling), F1.4
IR Range	1.5m
Shutter speed	1/30s-1/5000s
Signal-to-Noise Ratio	≥ 48dB
Lens	3mm M12-type, F1.6
FOV (H x V)	76° x 44°
Audio	Built-in microphone

Environmental

Dimensions (LxWxH)	98×30×43mm 3.9×1.2×1.7"
Temperature	-40°C - +70°C -40°F - +158°F

Technical Specifications (cont'd)

Humidity	0% - 90%
Power	DC 9-18V
Power consumption	<2.1W
Net weight	230g 8.1oz
IP Rating	IP53

Road Camera

Camera Parameters

Model	CA20S V3.0 (SVT-A6720MS)	CA20S (SVT-A6210MS)
ADAS Capable	Yes	No
Video Output	AHD, 4Pin Aviation connector	
Video Resolution – HD	1080P (1920H x 1080V) @ 20 Frames/s	720P (1280H x 720V) @ 20Frames/s
Video Resolution – SD	576p (704H x 576V) @ 10 Frames/s	
Image Sensor	1/2.8" 2.13M pixel CMOS	1/3" 1.3M pixel CMOS
Minimum Illuminance	0.05lux (color)	0.01lux (color)
IR Range	n/a	
Shutter speed	1/25s-1/25,000s (auto)	
Signal-to-Noise Ratio	≥ 50dB	
Lens	8mm M12, F2.1	2.8mm M12, F2.0
FOV (H x V)	42° x 24°	92° x 51°
Aud	n/a	

Environmental

Dimensions (LxWxH)	87×54.5×39mm 3.4×2.1×1.5"	85×54.5×39mm 3.3×2.1×1.5"
Temperature	-40°C - +70°C -40°F - +158°F	

Technical Specifications (cont'd)

Humidity	<90% (no condensation)
Power	DC 12V \pm 10%
Power consumption	90mA/DC12V \pm 5%
Net weight	\pm 100g 3.5oz
IP Rating	N/A

In-Cab Camera

Camera Parameters

Model	C6A
Video Output	AHD, 4Pin Aviation connector
Video Resolution – HD	720P (1280H x 720V) @ 20 Frames/s
Video Resolution – SD	576p (704H x 576V) @ 10 Frames/s
Image Sensor	1/3"1.3M pixel CMOS
Minimum Illuminance	0Lux (IR on)
IR Range	10-15m
Shutter speed	Auto
Signal-to-Noise Ratio	\geq 50dB
Lens	2.3mm
Audio	Built-in microphone

Environmental

Dimensions (LxWxH)	98×30×43mm 3.9×1.2×1.7"
Temperature	-40°C - +70°C -40°F - +158°F
Power	DC 12V \pm 10%

Technical Specifications (cont'd)

Power consumption	120m A/DC 12V (IR on)
IP Rating	N/A

Side Camera

Camera Parameters

Model	CA39 (SVT-A6320HS)	CA39A (SVT-A6410HS)
Video Output	AHD, 4Pin Aviation connector	
Video Resolution – HD	1080P (1920H x 1080V) @ 20 Frames/s	720P (1280H x 720V) @ 20Frames/s
Video Resolution – SD	576p (704H x 576V) @ 10 Frames/s	
Image Sensor	1/2.8 " 2.13M pixel CMOS	1/3 " 1.3M pixel CMO
Minimum Illuminance	0.0lux (IR on), 0.05Lux (IR off)	
IR Range	10-15m	
Shutter speed	1/25s-1/25,000s (auto)	
Signal-to-Noise Ratio	≥ 50dB	
Lens	2.8mm M12, F2.2	2.8mm M12, F2.0
FOV (H x V)	103° x 56° x 121°	91° x 50° x 107°
Audio	n/a	

Environmental

Dimensions (LxWxH)	66×58×46mm 2.6×2.3×1.8"	
Temperature	-40°C - +70°C -40°F - +158°F	
Humidity	<90% (no condensation)	
Power	DC 12V ± 10%	
Power consumption	260mA/DC12V ± 5%	240mA/DC12V ±5%
Net weight	± 180g 6.3oz	

Technical Specifications (cont'd)

IP Rating	IP69K
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Rear Square Camera

Camera Parameters

Model	CA4	953C4XR
Video Output	AHD, 4Pin Aviation connector	IPC, 6Pin Aviation connector
Video Resolution – HD	1080P (1920H x 1080V) @ 20 Frames/s	
Video Resolution – SD	576p (704H x 576V) @ 10 Frames/	
Image Sensor	1/2.8 " 2.13M pixel CMOS	1/2.9 " 2.0M pixel CMOS
Minimum Illuminance	0.0lux (IR on), 0.05Lux (IR off)	0.1Lux (color), 0Lux (IR on)
IR Range	10m	8-10m
Shutter speed	1/25s-1/25,000s (auto)	1/30s-1/10000s
Signal-to-Noise Ratio	≥ 50dB	≥48db
Lens	2.8mm M12, F2.2	2.8mm M12, F1.2
FOV (H x V)	103° x 56°	108° x 61°
Audio	No	Built-in microphone

Environmental

Dimensions (LxWxH)	75×65.1×37.7mm 3×2.6×1.5"	
Temperature	-40°C - +70°C -40°F - +158°F	
Humidity	<95% (no condensation)	0% - 90%
Power	DC 12V ± 10%	DC 8-15V
Power consumption	130mA/DC12V ± 5%	≥2.2W
Net weight	± 280g 9.9oz	± 270g 9.5oz
IP Rating	IP67	

Technical Specifications (cont'd)

Rear Square Camera

Camera Parameters

Model	CA38
Video Output	AHD, 4Pin Aviation connector
Video Resolution – HD	1080P (1920H x 1080V) @ 20
Video Resolution – SD	576p (704H x 576V) @ 10 Frames/s
Image Sensor	1/2.9 " 2.0M pixel CMOS
Minimum Illuminance	0.0lux (IR on), 0.05Lux (IR off)
IR Range	3-5m
Shutter speed	1/25s-1/25,000s (auto)
Signal-to-Noise Ratio	≥ 48dB
Lens	2.2mm M12
FOV (H x V)	178° x 142° x 80°
Audio	n/a

Environmental

Dimensions (LxWxH)	196.7×29.5×30mm 7.7×1.2×1.2"
Temperature	-40°C - +70°C -40°F - +158°F
Humidity	0% - 95%
Power	DC 12V ± 10%
Power consumption	130mA/DC12V ± 5%
Net weight	± 200g 7.1oz
IP Rating	IP69K

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