CV5000 Series

Multiple Channels AI-Powered Connected Dash Camera

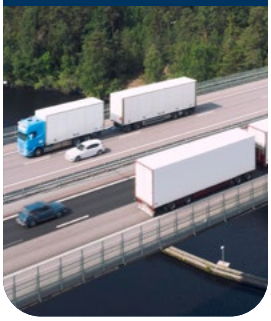
- High-Performance AI Chipset
- Up to 4 Video Channels
- Dual Memory Card Support
- Dual-Band GNSS Receiver
- Full Telematics Features

The CV5000 Series is engineered to elevate commercial vehicle operations with cutting-edge video technology. Powered by a state-of-the-art video processor and a high-precision object recognition algorithm, it ensures enhanced driving safety. With built-in Wi-Fi and Bluetooth, the dashcam seamlessly connects to external BLE sensors and allows remote control via a dedicated mobile app. Its dual-TF card design offers greater flexibility and extended recording time, making it ideal for long-haul usage. The CV5000 Series is perfectly suited for a wide range of applications, including insurance claim support, driver coaching, in-cabin monitoring, and incident documentation.

- LTE Cat 4 High-Speed Connectivity
- Live Streaming & Monitoring
- Crucial Recordings Auto Upload
- Built-in Mic and Speaker
- Dual-Band Wi-Fi with AP & Station Mode
- BLE Sensor Connectivity
- Driving Behavior Monitoring
- Battery Over-Discharge Protection
- One-Touch SOS
- Tamper-Resistant Design

Applications

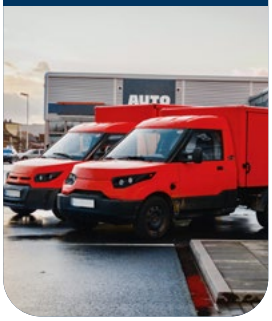
Cargo Logistics



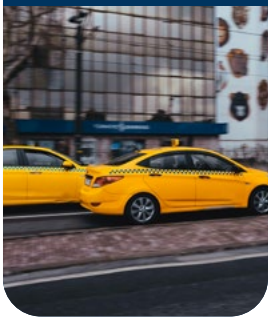
Public Transport

Construction Vehicles

Light Urban Deliveries



Taxi & Ride Hailing



Accessory Camera Options

Connect up to 3 extra cameras for 360° vehicle view.

· DMS Cam

ADSM001
Dashboard-mounted DMS Camera

ADSM002
Windshield-mounted DMS Camera

· Cargo Cam

ACAM120
Cargo View Camera

ACAM140
Waterproof Cargo Bay Camera

· Windshield Cam

ACAM001
Cabin View Camera (front windshield-mounted)

ACAM002
Rear View Camera (rear windshield-mounted)

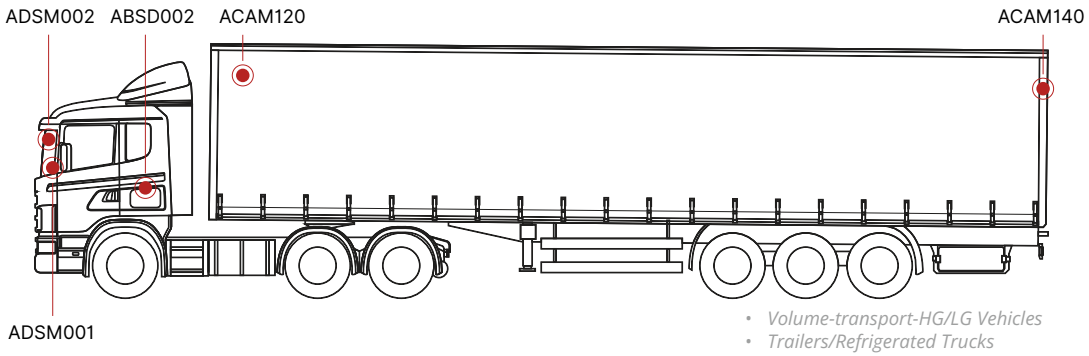
· Detachable Cam

iCAM100
Detachable In-cab View Camera

· BSD Cam

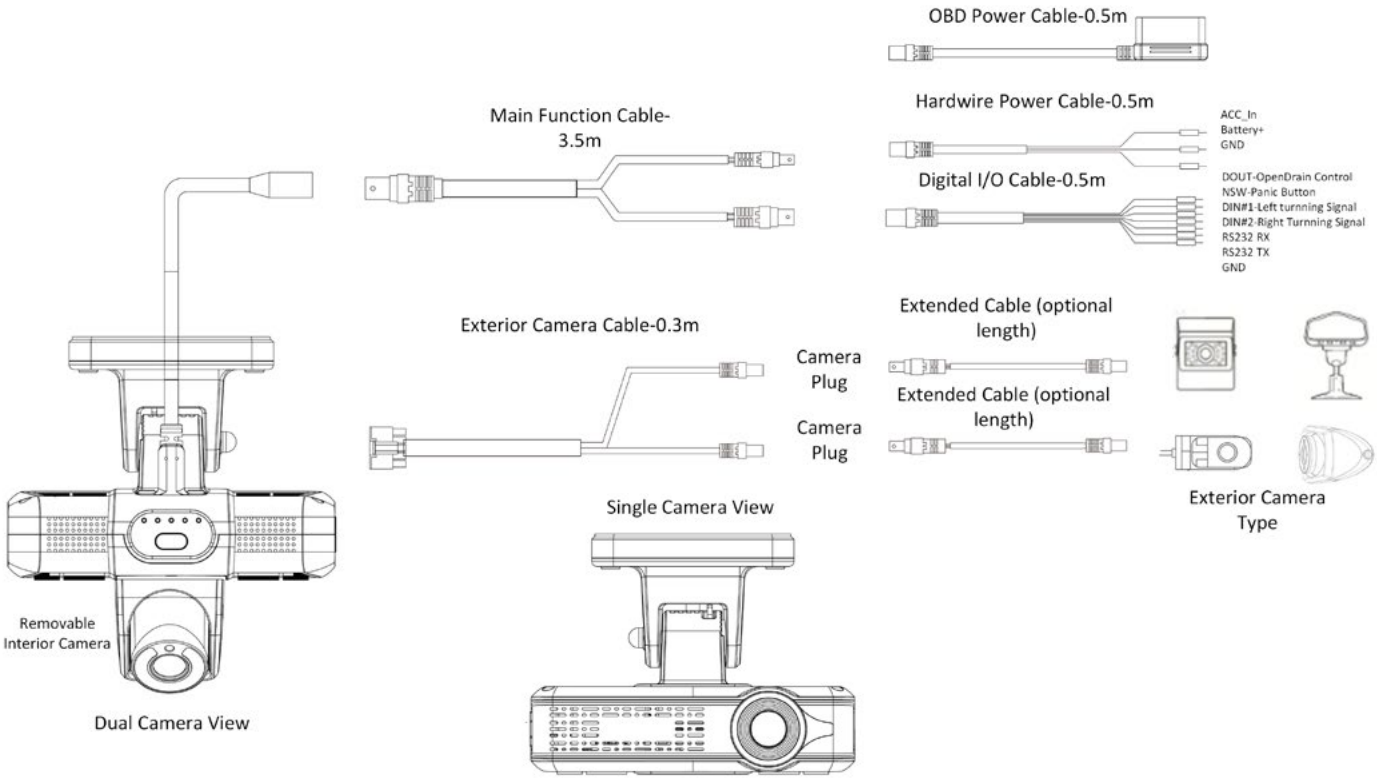
ABSD002
BSD Side View Camera

Typical Scenario

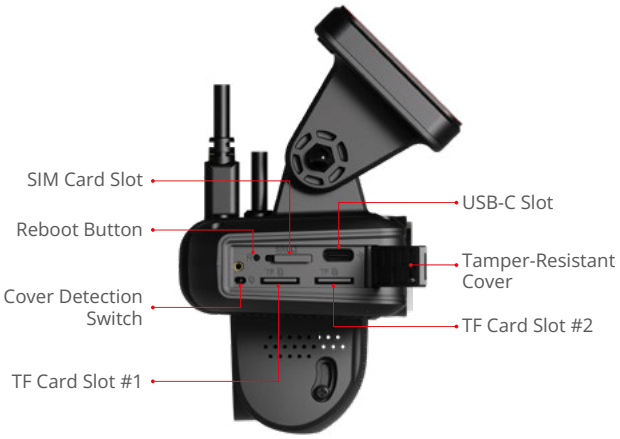


- *Volume-transport-HG/LG Vehicles*
- *Trailers/Refrigerated Trucks*

Diagram



Component Diagram



General Specifications

Dimensions	120(L)*129(H) *71(W) mm * Dual Lens 120(L)*88(H) *71(W) mm * Single lens
Weight	330g approx. Single lens 365g approx. Dual lens
Power Lost Protection	Super Capacitor (10F × 2) provides 10–15 seconds of safe power backup
Power Input	DC 8~32V
Power Supply	Hardwire from fuse box OBD power
Operating Temperature	-20°C ~ +70°C
Storage Temperature	-40°C ~ +85°C
Integrated Bracket	Windshield installation with adhesive tape, bracket rotation up to 80°, and removable in-cab facing camera with 45° rotation

Cellular

Network Type	LTE CAT 4, Fallback 3G, 2G	
Frequency Bands	LTE-FDD: B1/3/5/7/8/20/28 LTE-TDD: B38/40/41 WCDMA: B1/5/8 GSM: B3/B8	EMEA Bands (Model : CV5000LEU)
	LTE-FDD: B1/2/3/4/5/7/8/28/66 LTE-TDD: B40 WCDMA: B1/2/4/5/8 GSM: B2/3/5/8	LATAM Bands (Model: CV5000LAU)
	LTE-FDD: B2/4/5/12/13/14/66/71 WCDMA: B2/4/5	North America Bands (Model: CV5000LNA)

BLE

Working Mode	BT 5.4, BLE

WIFI

Working Mode	AP & Station
Frequency	Dual Bands 2.4GHz & 5GHz

GNSS

Type	Dual bands L1+L5, GPS / BDS / GLONASS / Galileo, AGPS
Sensitivity	Tracking: -165dBm Reacquisition: -148dBm Cold start: -149dBm Hot start: -157dBm
Position Accuracy (CEP50)	<1m
TTFF	Cold start: 24s average hot start: 1s average Reacquisition: 1s average

Hardwire Harness

Power Supply	Battery+ / ACC_IN / GND
Serial Port	1* RS232
Digital I/Os	1* Negative Trigger (for film panic button) 2* Digital Input (for left / right turning detection) 1* Open-drain Output (to control Relay or Lamp etc.)
Additional Camera	2* Exterior cameras connection 1280*720P (1 Megapixel) Plug & play

Video/Audio

Image Sensor	SONY STARVIS Sensor / HDR / Low Light Performance / 1920×1080 (2 Megapixel)
Lens	Wide Angle DFOV (Diagonal Field of View) > 140° / 6-Layer Glass with IR Coating / F1.8 Aperture
Recording Quality	Main and Sub Stream, Adjustable resolution
On-screen Display	Date & time, Vehicle Speed, Coordinates, G-sensor Data, Channel Name, Brand Overlay
External Storage	2* Micro SD, UHS-1 512GB Max
Recording Mode	Continuous recording with cycle overwrite and event-based pre-and post-event recording
Audio Control	Enable / Mute
Voice Volume	Mute / Low / Medium / High
Video Format	MP4
Image Format	JPG
Microphone	Built-in, Noise Reduction
Speaker	Built-in, 2 Watts

Interfaces

SIM Card	Nano SIM
Memory Card	Micro SD *2
IMU	3-axis Accelerometer + 3-axis Gyroscope
Reset Button	Support
Anti-Tamper Button	Support
Multi-Function Button	Wi-Fi Switch / Panic Button / SOS Alarm
LED Indicator	PWR - red, power status GNSS – blue, gnss status REC – white, recording status CEL – green, network status MIC – yellow, microphone status (User-defined in future)
USB-C #1	Side Panel – Upgrade / Debug / Configuration / Data Transmission *
USB-C #2	Bottom – 1* In-cab View Camera, 1280*720P (1 Megapixel), Plug & Play

Function

Network Protocol	TCP (TLS), UDP, SMS, FTP(S / ES) RTMP(S), HTTP(S), NTP
File Transmission	Upload videos and pictures to file server via IP network
Live Streaming	Monitor the front and interior view anytime
On-Demand Video	Request video for downloading and playback
Event-Based Recording	Automatically record footage when specific events are triggered or the panic button is manually pressed
Smart AI*	• ADAS: FCW, HMW, PCW, LDW • DMS: Eye Close, Yawning, Distraction, Smoking, Phone Use, Driver Abnormal, IR Blocking, Seatbelt Unfastened • BSD: Blind Spot Detection • Video Detection: Video Blind & Video Lost Detection
Time Synchronization	NTP / GPS / RTC
Smart Storage Assignment	Overwrite recordings in a loop with customizable storage allocation
Over-discharge Protection	Power cut-off to protect against vehicle battery over-discharge
Parking Safeguard	Detect impacts and bumps during parking
Vehicle Telematics	Live Tracking, Geo / Peo-fence, Speeding, Harsh Driving Behavior, Crash Detection, Total Mileage
Updating & Configuration	OTA and Local Maintenance
Message Saving	Up to 10,000 buffer messages