

WeLog

Al Video Telematics

Processor Unit

- Wifi / Bluetooth
- IMU (6 DOF)
- Cellular Connectivity (2G, 3G, 4G LTE)
- CAN-Bus Module
- Powerful Al Computing Unit





Camera Unit

- ADAS Warning Indicator and Speaker
- Forward Facing Camera
- Driver Monitoring Camera (Optional)
- GNSS

WeLog is a connected and scalable AI Video Telematics Device with ADAS warning capability that can be easily retrofitted into any vehicle. It features powerful edge computing for fused perception, location, and in-vehicle network data. WeLog enhances road safety by providing ADAS warnings, detecting road surface defects, and other functionalities. It processes vehicle and sensor data with AI algorithms and sends them to the cloud or local servers. It can also communicate warning data via V2X capability to phones, infrastructure, and various devices over the internet. It can be used as a hardware platform to implement your software development.



Data Acquisition

Processing vehicle data using edge computing with Al-based models and transferring to the server



ADAS Warning

Real-time warnings for forward collision (FCW), pedestrian collision (PCW), lane departure (LDW), pothole detection (PDW), and others



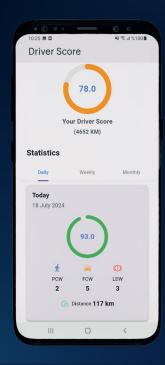
Remote Data Storage

Collected raw and processed data are stored on local servers or cloud



V2X

Transmitting real-time warning data to surrounding phones, infrastructure and various devices via the internet









Welog General Specifications

Interface

- 2 CAN
- 2 USB
- 2 Cameras
- Bluetooth 4.2 BLE

Functions supported

- Multi-camera recording
- Time synchronization
- Al-based data acquisition
- Easy access via mobile app
- ADAS Warnings
- V2X Communication

Tech Specs

- Micro-SIM, MicroSD card (max 512GB)
- 1080p 30fps image recording
- Real-time video streaming
- CAN-Bus message logging
- OBD-II and J1939 connection
- GPS 3m precision, IMU with 6 DOF
- Weight: 420g, Dimensions: 12x12x5cm
- Supply Voltage: 9-30V DC (20W)

Potential Applications

Sectors	Purpose of Use	Applications	
Retrofit Vehicle	WeLog enhances vehicle safety and performance by providing advanced data collection, ADAS integration, and remote testing and monitoring capabilities.	Passenger vehicle	
		Military vehicle	
		Off-road vehicle	
Mobility Software Developers	WeLog can be used as a hardware platform to implement software development in mobility solutions.	ADAS Functions	
		Driver Scoring	
		Driver Monitoring System	
Insurance	WeLog scores driving behavior to be used in determining personalized insurance rates.	Usage-based insurance	
Custom and Infrastructure Solutions	WeLog offers tailored solutions for managing operations in municipalities, shopping malls and airports, such as road defect detection driver scoring, and people counting.	Municipalities	
		Infrastructure providers	

WeLog Family

Feature	WeLog Lite	WeLog Standard	WeLog Pro
IMU, GNSS, Wifi/BT, LTE	Available	Available	Available
CAN-Bus Integration	2 CAN	2 CAN	2 CAN
Camera Support	N/A	2 Cameras	2 Cameras
GPU	N/A	128 CUDA cores	1024 CUDA cores
Tensor Cores	N/A	N/A	32 Tensor cores
Al Performance	N/A	0.5 TOPS	40 TOPS
Video Coding & Decoding	N/A	4K @ 30fps,	4K @ 60fps,
ADAS Warnings	N/A	FCW, LDW, PCW, PDW	FCW, LDW, PCW, PDW, and more features

