






Road-Only AI Dashcam for Fleets

-  Built-in GPS tracking
-  Advanced Driver Assistance System
-  Wi-Fi hotspot
-  Wide-angle, road-facing view
-  Plug & Play installation (OBD-II & JBUS)



Wake-up at will

Remote wake-up and sleep mode allows your team to stream or view historic footage when needed while also conserving vehicle battery life.

Driving has never been safer

FleetCam Essential's powerful AI continuously monitors the road, detecting critical safety events, such as lane departures, follow distance, and more.

Next-level clarity

Armed with 1080P HD resolution, FleetCam Essential gives you the clarity you need while infrared ensures excellent low-light performance.

Effortless communication & tracking

With Wi-Fi, 4G communication, positioning module, and regular GPS updates, fleet tracking becomes more precise, and mobile hotspot keep driver devices easily connected.

FleetCam Essential Road Only

Built on powerful AI edge processing, the FleetCam Essential gives you everything you need to monitor your fleet and improve driver safety and accountability. It features AI safety event detection and alerts, and a crystal-clear, HD road-facing camera with excellent low-light visibility.

Specification

Positioning

GNSS	Supported
	GPS L1 C/A: 1575.42 MHz
	Galileo E1: 1575.42 MHz
	GLONASS L1: 1598.0625~1605.375 MHz
	BDS B1, BDS B1C, QZSS L1 C/A

Network

Wi-Fi	Support 2.4G (IEEE Std. 802.11a/b/g/n)
4G	North America: LTE FDD: B2/B4/B5/B12/B13/B14/B66/B71 WCDMA: B2/B4/B5
	Europe and Asia: LTE FDD: B1/B3/B7/B8/B20/B28A WCDMA: B1/B8, GSM: B3/B8
	Latin America: LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28 LTE TDD: B40, WCDMA: B1/B2/B5/B8 GSM: B2/B3/B5/B8

Physical

Dimensions (MM)	Dashcam: 113.0 mm (length) × 67.2 mm (width) × 57.0 mm (height, without bracket)
Weight (kg)	Net weight (device only): 295g Gross weight (including accessories and package): 745g Deviation: ±10g

Storage & Sensor

Six-axis Sensor	Harsh acceleration, Harsh deceleration, Harsh cornering
Micro SD card	Micro SD card×2, (SDXC 32GB/64GB/128GB/256GB/512GB) (FTS Approved SD cards only)

Port

I/O Port	1-channel input
Button	1- Single click for SOS or Manual trigger event 2- Press and hold to enable Privacy Mode 3- Press twice within 2 seconds to enable WiFi AP Mode

Power

Power supply	12-24V Range
Power consumption	<ul style="list-style-type: none">• standby: 13.5V@5.66mA, 27V@3.4mA• sleep: (4G and MCU powered): 13.5V@71~125mA, 27V@30~56mA• Typical power consumption: ~7.56W• Full-load power consumption: ~10.06W

Audio-Video

AV Recording	2-channel (road-facing + auxiliary camera support)
Video Coding	H.265
Audio Compression	G.711
Audio	Built-in MIC
Loudspeaker	Built-in speaker, power: 3W, with adjustable volume, not less than 70 dB at 1 m distance

Environment

Operating Temp.	-40°C ~ +70°C (-40°F ~ +158°F)
Storage Temp.	-40°C ~ +85°C (-40°F ~ +185°F)
Operating and storage Humidity	15~95% non-condensing
IP Rating	IP30

Recording

Video Compr. Format	H.264/H.265 (Default)
Audio Compr. Format	ADPCM, G.711, G.726
Image Resolution	ADAS: 1080P (1920 × 1080) Supports PAL & NTSC

Status Indicators



Power Status Lights

Off: The device is not powered on

Steady green: The device is powered normally



Alarm Indicator

Off: The device is not currently uploading data

Red flashes three times: The device is uploading data



GPS Signal Indicator

Off: Normal

Steady red: No GPS, or module may be malfunctioning

Red flash (once per second): GPS reception is poor



Network Status Indicator

Off: The device is connected to the server normally

Steady red: The device is not connected to the server



Wi-Fi Status Indicator

Off: The device is in Disable or Client mode

Steady green: The device is in AP mode

Steady red: There is an issue with the Wi-Fi



Recording Status Indicator

Off: The built-in or extended camera is operating normally

Steady red: The built-in or extended camera stopped recording (including privacy mode)/failed

FleetCam Essential Road Only – Driver Events

ADAS Features



Following Distance Warning



Forward Collision Warning



Lane Departure



Rolling Stop Sign



Pedestrian Warning

Harsh Events



Harsh Cornering



Harsh Accelerating



Harsh Braking

System Events



Low Voltage



Memory Error



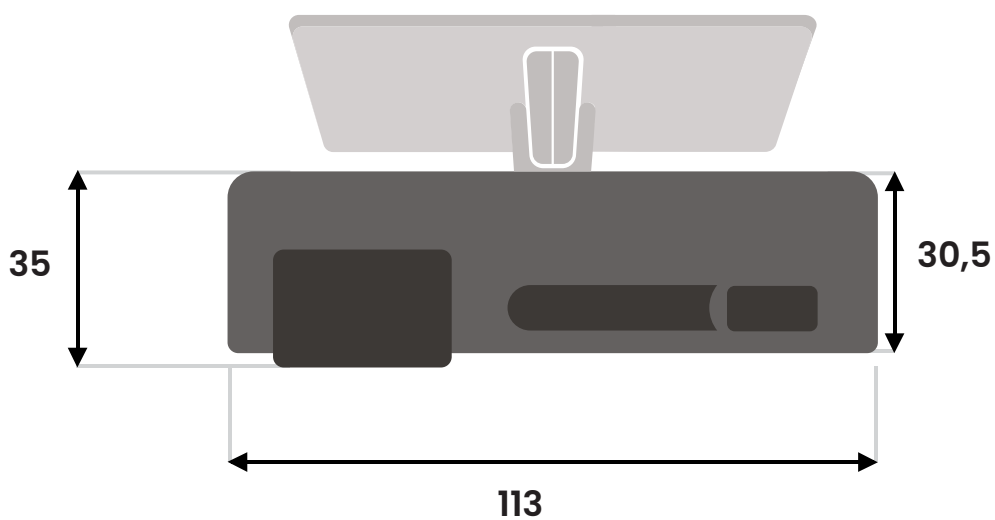
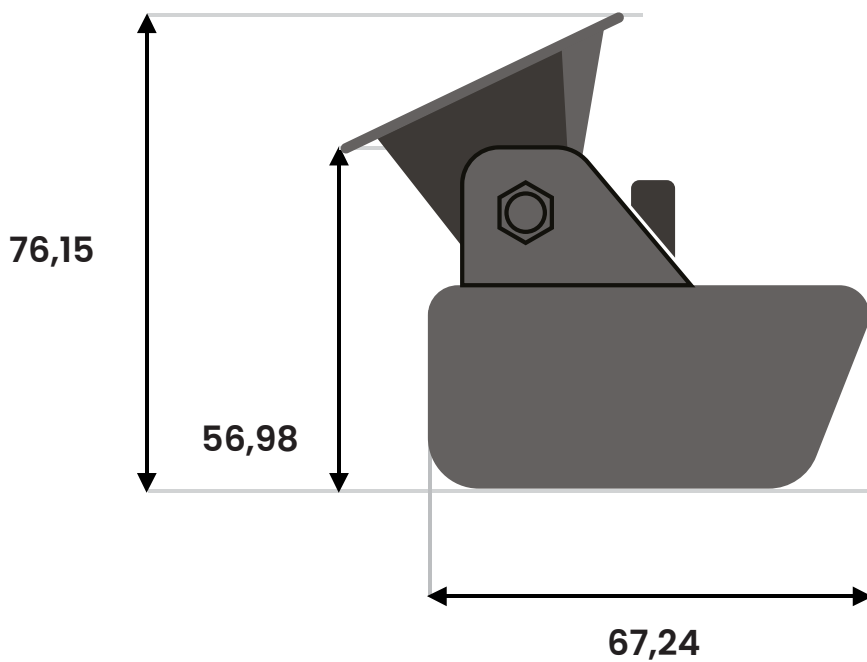
Video Loss

Other



SOS/PTO Event

Dimensions (mm)



Feature Comparison Chart



Essential



Pro

Video recording

2-channel

Up to 5-channel

Video resolution

1080P Road

1080P Road

Field of view (fov)

106° road

140° road

AI Driver Events

YES

YES

6-Axis Accelerometer

YES

YES

GPS

High precision GNSS

High precision GNSS
with dead-reckoning

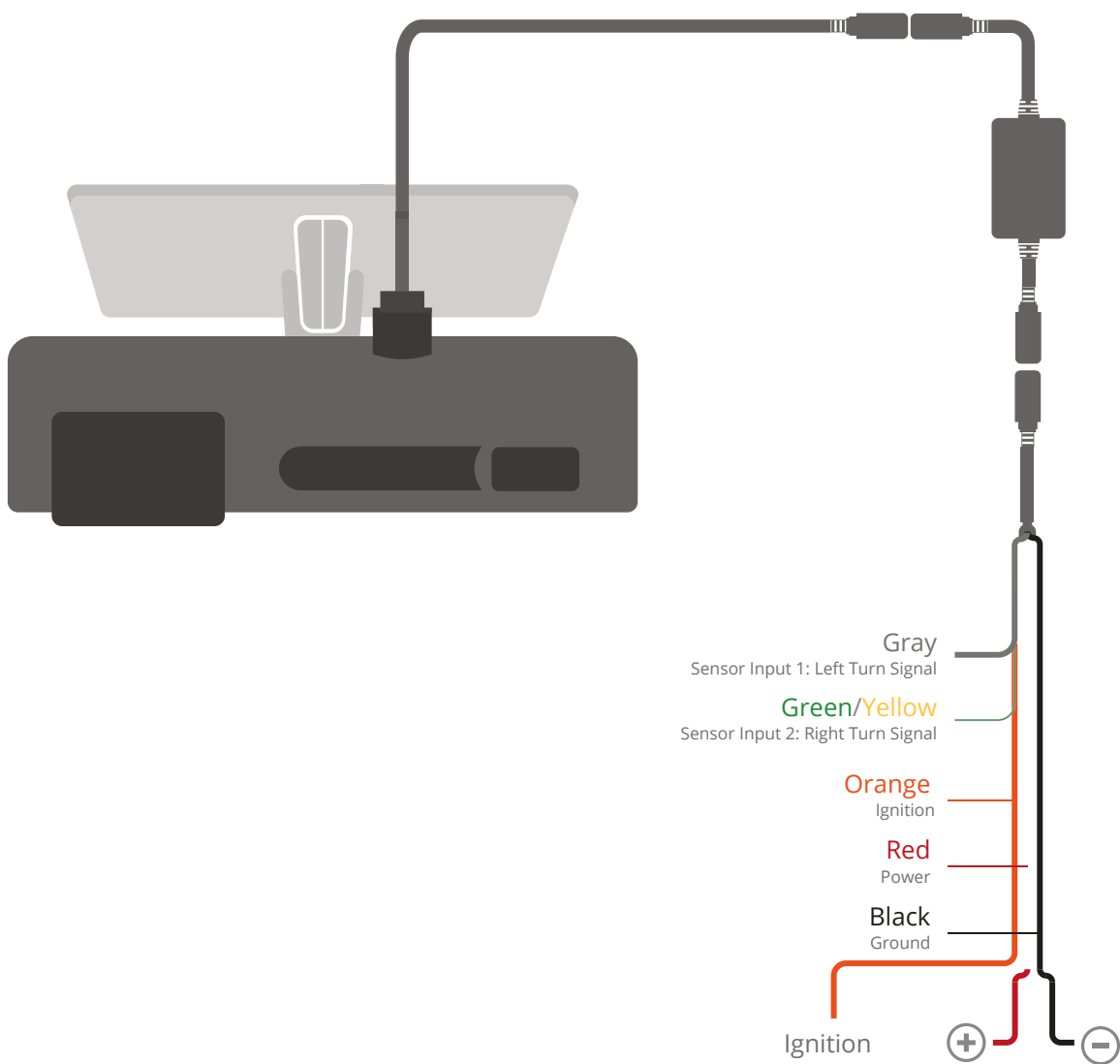
Add-ons

Up to 1 external camera

Up to 4 external cameras and 1 LCD

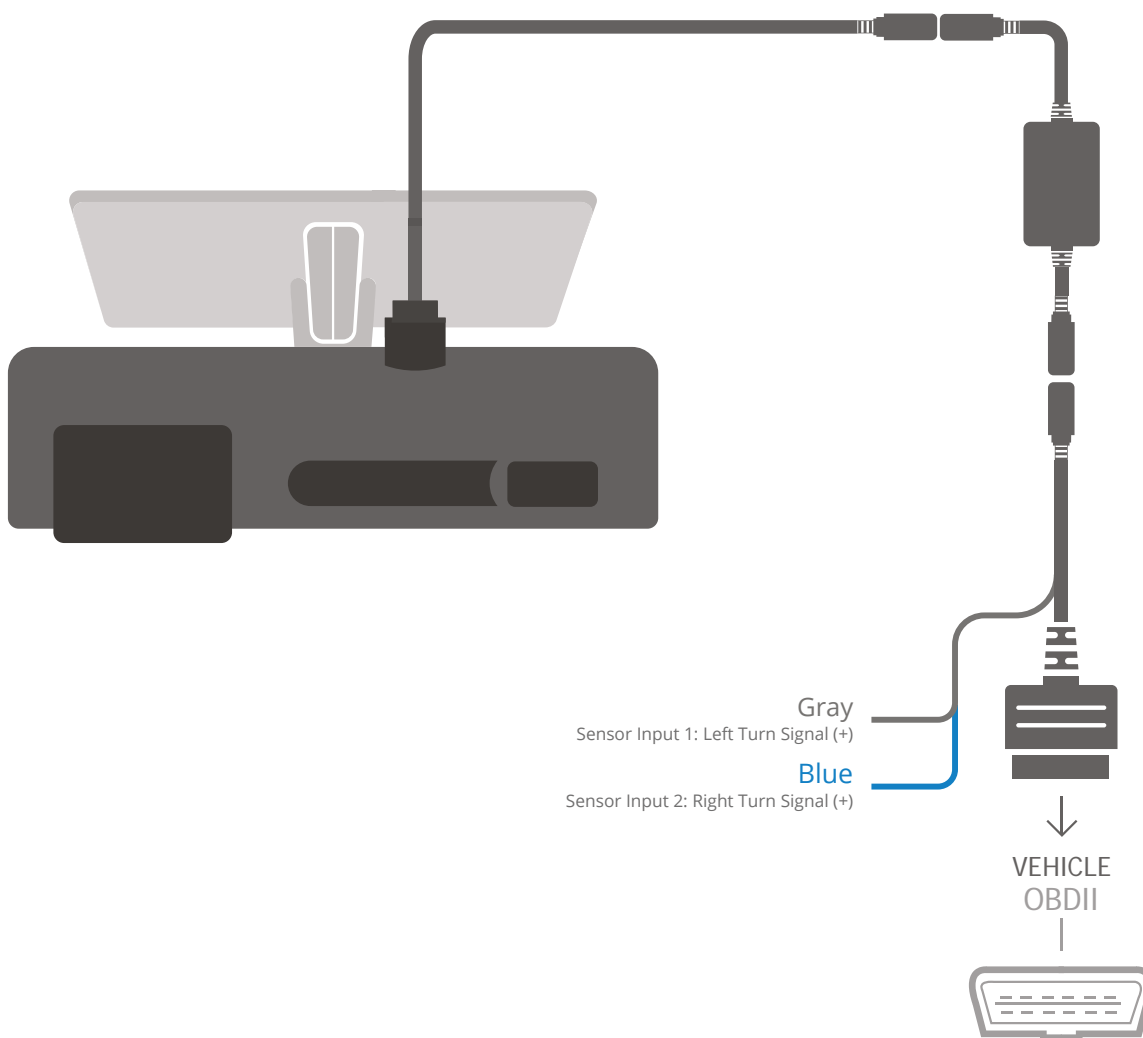
System Connection Diagrams

1. FleetCam Essential Road Only Hardwired



System Connection Diagrams

2. FleetCam Essential OBD-II



System Connection Diagrams

3. FleetCam Essential JBus

