FleetCam® Essential Road Only
FC-ESNTL-NA-R-TME32C

Road-Only AI Dashcam for Fleets

- Built-in GPS tracking
- Advanced Driver Assistance System
- 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.

Next-level clarity

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

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.

Effortless communication & tracking

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

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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
Bluetooth®		Bluetooth 4.2

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	128GB eMMC + 1x 32GB microSD (upgradeable up to 1TB) (FTS Approved SD cards only)

Port

I/O Port	2input/1-output

Power

Power Supply	9-36V Range
Power Consumption	• **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 adjustablevolume, not less than 70 dB at 1 m distance

Enviroment

Operating Temp.	-40°C ~ +70°C (-40°F ~ +158°F)
Storage Temp.	-40°C ~ +85°C (-40°F ~ +185°F)
Operating & 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

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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

Button

SOS or Manual trigger event: Single Press
Privacy Mode: Press and hold to enable
WiFi AP Mode: Press twice within 2 seconds to enable

FleetCam® Essential Road Only – Driver Events

ADAS Features

- Following Distance Warning
- Forward Collision Warning
- Lane Departure
- Rolling Stop Sign
- Pedestrian Warning

System Events

- Low Voltage
- Memory Error
- Video Loss

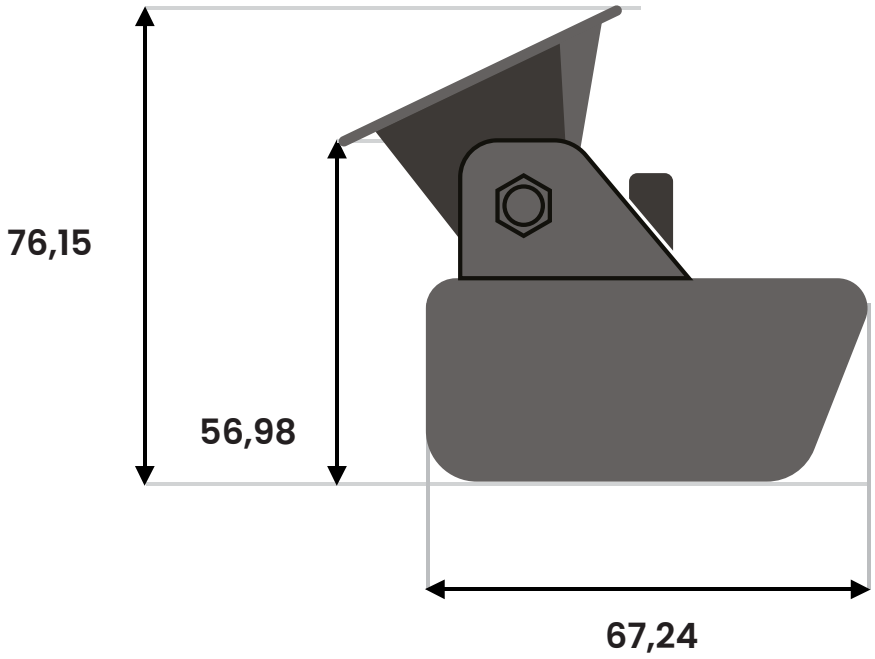
Harsh Events

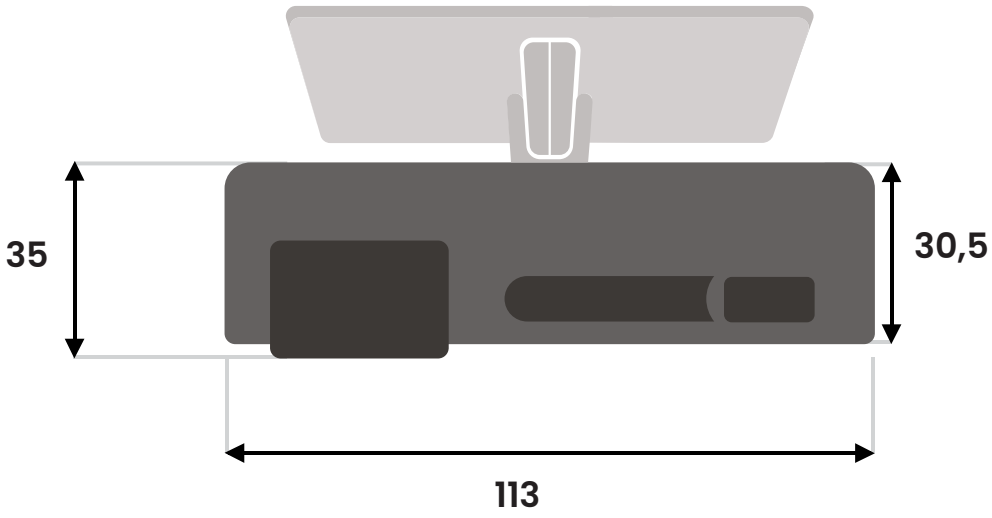
- Harsh Cornering
- Harsh Accelerating
- Harsh Braking

Other

- SOS/PTO Event

Dimensions (mm)



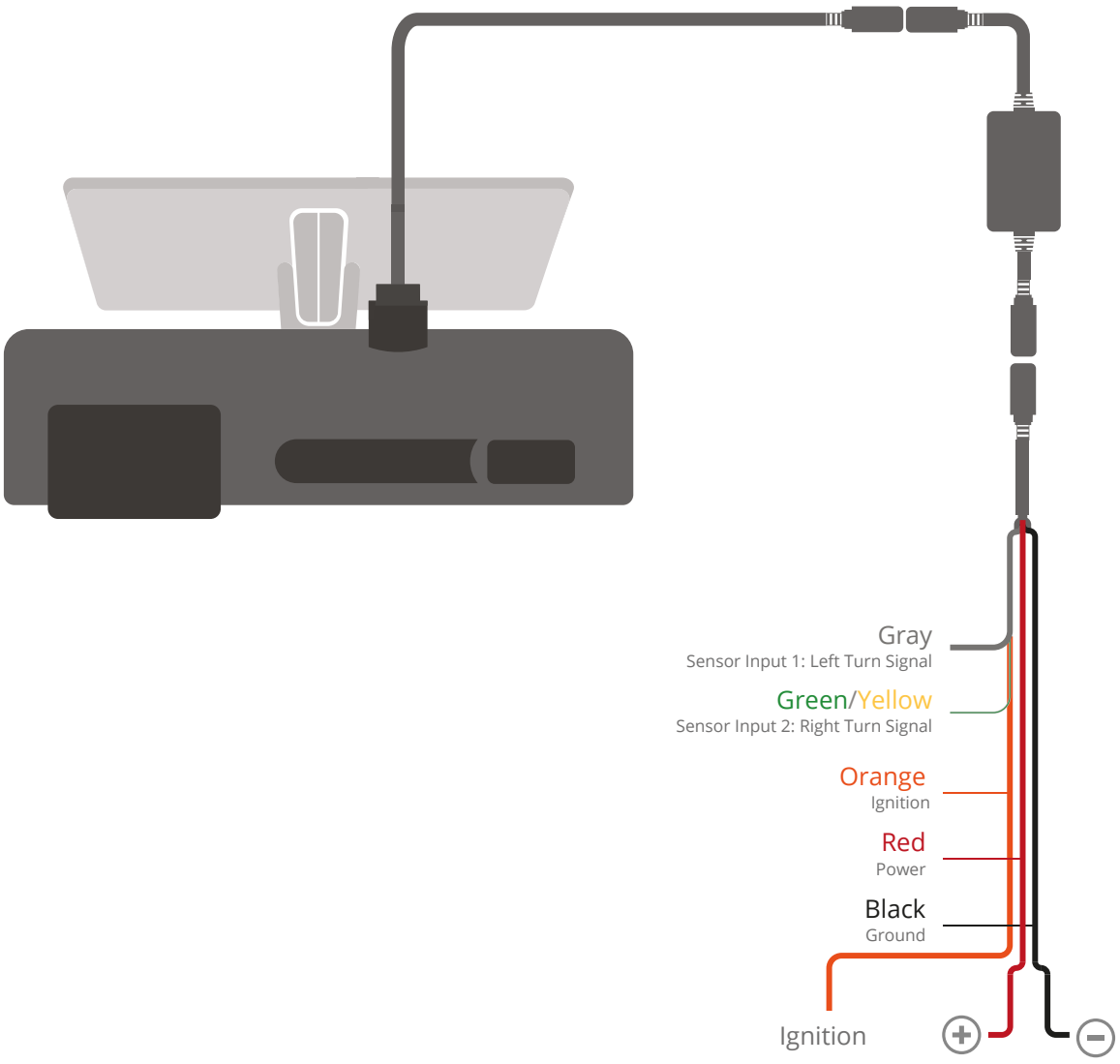


Feature Comparison Chart

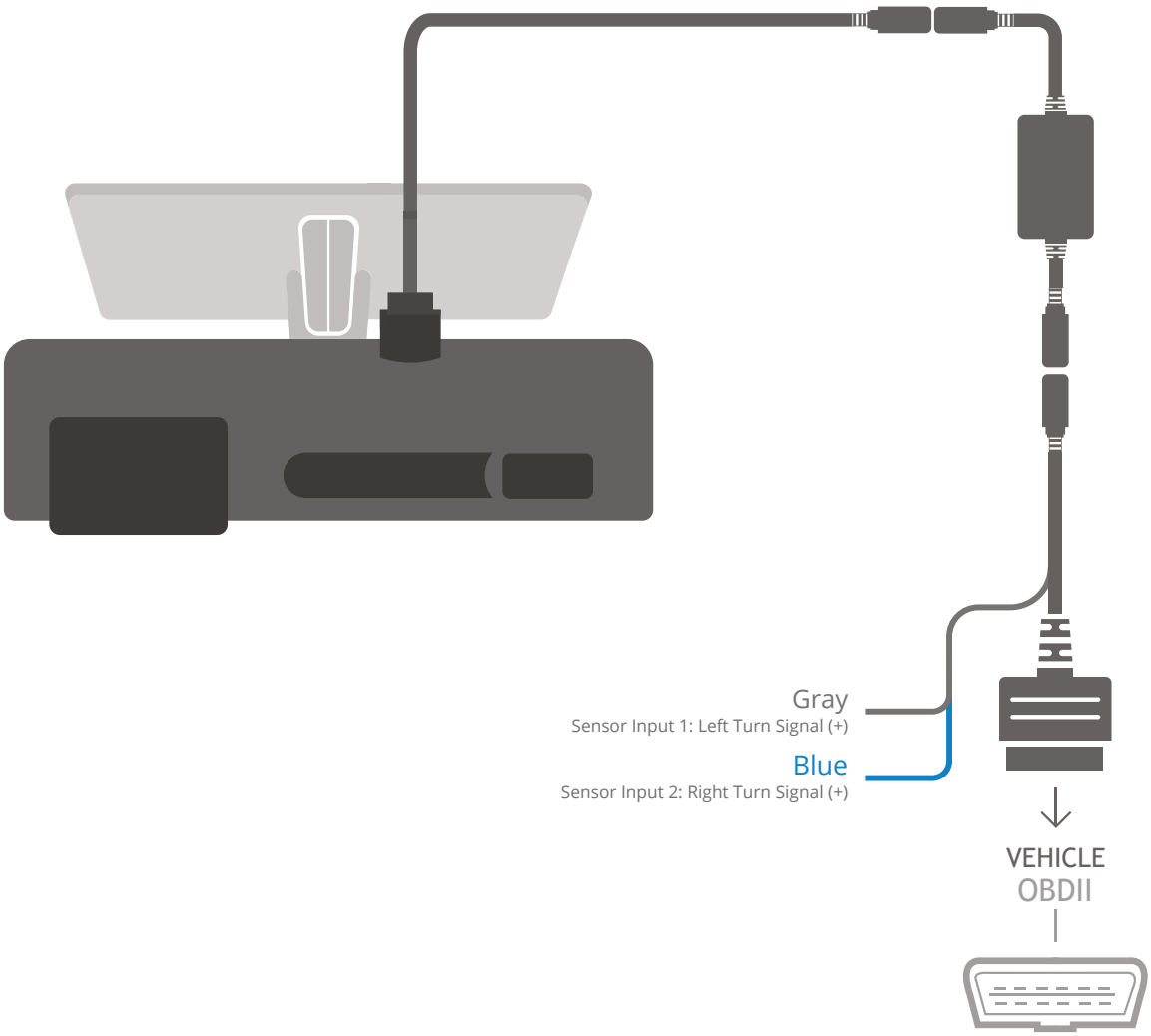
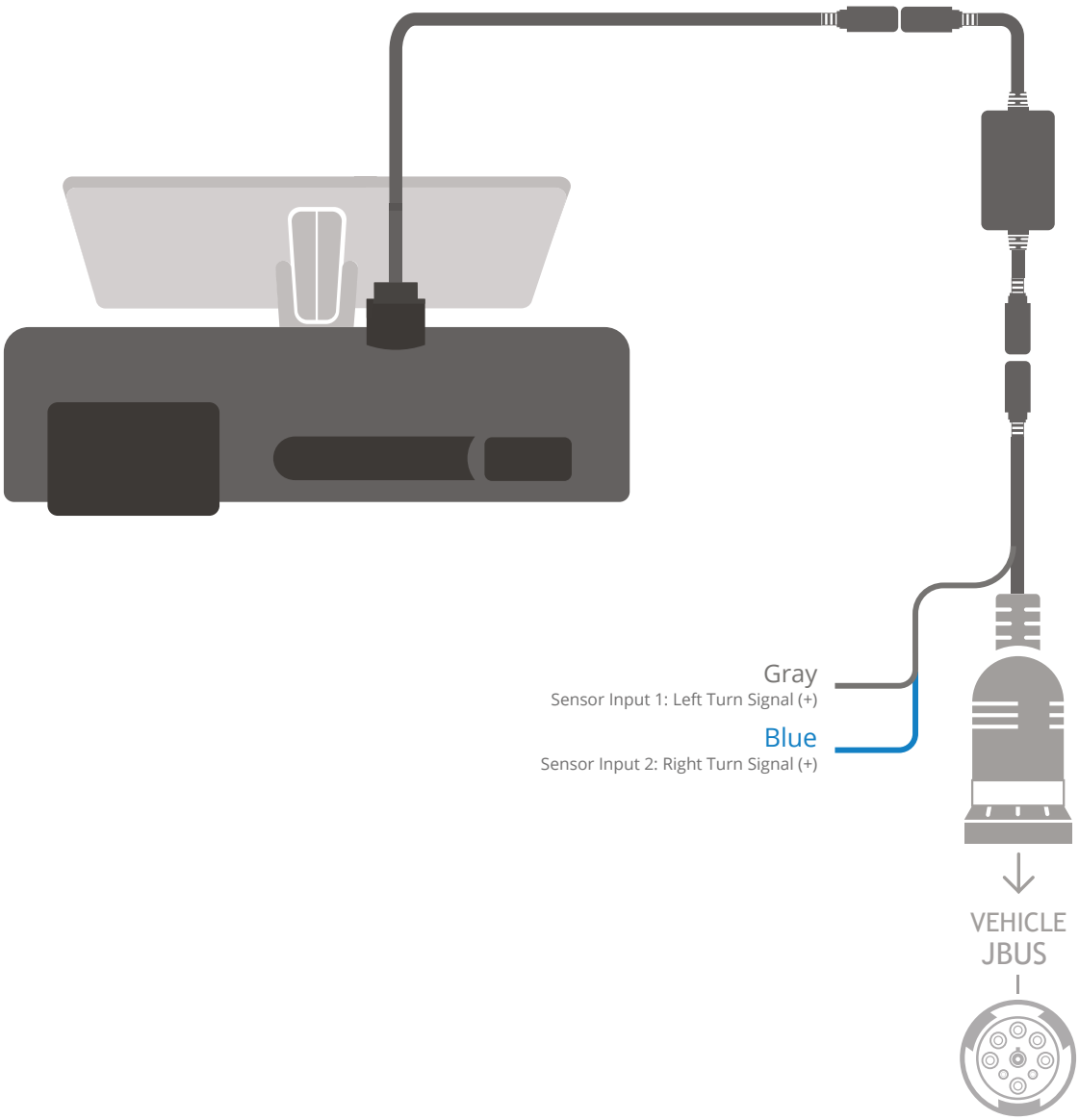
	Essential	Pro
Video recording	2-channel	Up to 5-channel
Video resolution	1080P Road	1080P Road
Field of view (fov)	106° road	140° road
AI Driver Events	YES	YES
6-Axis Accelerometer	YES	YES
GPS	High precision GNSS	High precision GNSS with dead-reckoning
Add-ons	Up to 1 external camera	Up to 4 external cameras and 1 LCD

System Connection Diagrams

1. FleetCam® Essential Road Only Hardwired



2. FleetCam® Essential OBD-II



3. FleetCam® Essential JBus