

GF-LITE-D



AI-powered dual-lens dashcam

The GF-LITE-D is a compact, cost-effective, AI-enabled dashcam designed for drivers and fleet managers, delivering HD recording, real-time alerts, and efficient event management.

► KEY FEATURES

**Wide 106° DFOV
road-facing lens**

Captures up to 1080P video for clear and detailed footage.

**Up to 2 x 512GB dual Micro
SD card storage**

Ensures simultaneous storage of both main and sub-stream videos.

**Ultra-wide 170° DFOV
driver-facing lens**

Captures up to 1080P video for clear and detailed footage.

**Built-in Wi-Fi and 4G
communication module**

Seamlessly integrates with fleet management systems.

**Support for up to 2-channel
video recording**

Expands monitoring capabilities with an additional video channel.

**AES256 data encryption
for secure storage**

Protects video and audio data with top-level security standards.

► KEY BENEFITS

✓ Advanced Safety Monitoring

Real-time alerts for road risks and unsafe driving behaviors.

✓ Efficient Fleet Management

Seamlessly uploads driving events to the cloud for monitoring and training.

✓ High-Quality Video & Audio

Provides ultra-wide, high-definition video and crystal-clear audio.

✓ Secure & Reliable Data Storage

Up to 2 x 512GB micro SD cards with encrypted video and audio storage enabling dual recording modes – SD & HD.

✓ Compact and Versatile Design

Streamlined design that doesn't obstruct the driver's view.

✓ Easy Installation & Integration

Optional OBD connector for simple plug-and-play setup.

► ADAS & DSM FUNCTIONS

ADAS FUNCTIONS



Lane
Departure



Tailgating
Detection



Forward
Collision

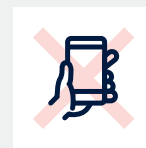


Pedestrian
Collision

DSM FUNCTIONS



Driver
Fatigue



Mobile Phone
Usage



Smoking



Driver
Distraction



No Driver
Present



No Seat Belt
Detection

► SPECIFICATIONS TABLE

General:

Feature	Specification
System	Embedded Linux
Languages	Chinese, English, Spanish, Portuguese, French, Russian, Japanese (default: English) <i>Languages include interface and voice prompts. TTS supports only Chinese and English.</i>
Recording	2 video channels (default), 1 audio channel
Maximum Resources (with 2 AI channels)	1080P @ 25 fps (ADAS) + 1080P @ 20 fps (DSC) Recommended Configuration: 1080P @ 20 fps + 1080P @ 15 fps
Video Encoding	H.264 / H.265 optional (default: H.265)
Audio Compression Standard	ADPCM / G.711 / G.726 optional (default: ADPCM)
CBR / VBR	VBR / CBR optional (default: VBR)
Audio	Built-in microphone
Speaker	Built-in speaker, 3 W power, sound level not less than 70 dB at 3.3 ft (1 m) distance, adjustable volume

Road-Facing Lens:

Feature	Specification
Sensor Type	1/2.9" 2 MP CMOS sensor
Shutter Speed	1/30 s to 1/100,000 s
Lens	4 mm focal length; HFOV: 89°, VFOV: 46°, DFOV: 106°, Tolerance: ±5°
Minimum Illumination	Color: 0.05 Lux / F1.2
Lens Interface Type	Built-in lens
Wide Dynamic Range	Digital WDR

Backlight Compensation	Supported.
Signal-to-Noise Ratio	≥48 dB.

Driver-Facing Lens:

Feature	Specification
Sensor Type	1/2.9" 2-megapixel CMOS sensor.
Shutter Speed	1/30 s to 1/100,000 s
Lens	Focal length: 2.2mm; HFOV: 151°, VFOV: 84°, DFOV: 170° ±5°.
Lens Mount	Built-in lens.
Wide Dynamic Range	Digital Wide Dynamic Range (WDR).
Backlight Compensation	Supported.
Signal-to-Noise Ratio	≥45 dB.
Infrared Light	Supported, with built-in ambient light sensor for automatic on/off. <i>Day-to-night threshold: 4 lux; night-to-day threshold: 8 lux. Measurements may vary.</i>

LED Indicator Status:

Feature	Specification
 Power Status Light	Off/Green Off: The device is not powered on Steady green: The device is powered normally
 Alarm Indicator Light	Off/Red Off: The device has not generated an alarm Flashing red (three times): The device has generated an alarm.

 GPS Signal Indicator Light	Off/Red Off: The device positioning runs normally Steady red: The device positioning runs abnormally (not positioned, or module not connected or damaged) Flashing red (once per second): The device positioning is poor
 Network Status Indicator Light	Off/Red Off: The device is connected to the server normally Steady red: The device is connected to the server abnormally Red flash (once per second): The device is in airplane mode
 Wi-Fi Status Indicator Light	Off/Red/Green Off: The device is in Disable or Client mode Steady green: The device is in AP mode Steady red: The device Wi-Fi runs abnormally
 Recording Status Indicator Light	Off/Red Off: The built-in or extended camera runs normally Steady red: The built-in or extended camera recording has stopped (including privacy mode) or has a fault. <i>* When the video recording function is enabled (main stream and sub stream), the prompt will be given if no recording is detected. If the video recording function is disabled (main stream and sub stream), it will be regarded as normal recording status.</i>

Storage:

Feature	Specification
MicroSD Cards	Dual Micro SD slots (supports 32GB/64GB/128GB/256GB/512GB each).
Recommended Rate	Class 10 or above.

Sensors:

Feature	Specification
Six-axis Sensor	Harsh acceleration/deceleration/cornering and collision detection.
Ambient Light Sensor	Supports day-night switching for the driver-facing camera.

Ports:

Feature	Specification
RS232	1-channel ⚠ Warning: Supports RS232 or CAN, with RS232 as the default option.
I/O Port	2 inputs, 1 output
CAN	1 channel (supports standard J1939 protocol) ⚠ Warning: Vehicle manufacturers may customize certain data fields. The actual data available is subject to practical testing. If the required data is not supported, a protocol can be provided for integration and development. Supports RS232 or CAN, with RS232 as the default option.
USB	1 channel, mini USB interface
Button	x 1 To switch Wi-Fi to AP mode, press the button twice within 2 s. <i>* For details of other buttons, refer to the user manual of the product.</i>

Network:

Feature	Specification
Wi-Fi	Support 2.4 GHz (IEEE Std.802.11a/IEEE Std.802.11b/ IEEE Std.802.11g /IEEE Std.802.11n)
4G	Plug-in SIM card (Nano SIM card) • For North America: LTE FDD: B2/B4/B5/B12/B13/B14/B66/B71 WCDMA: B2/B4/B5 • For Europe and Asia: LTE FDD: B1/B3/B7/B8/B20/B28A WCDMA: B1/B8 GSM: B3/B8

	• For 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 ⚠ Warning: An industrial SIM card (MP2) is required, an ordinary SIM card (MP1) is prohibited. We are not responsible for any problem caused by the use of any ordinary SIM card.
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Positioning:

Feature	Specification
GNSS	Supports GPS L1 1575.42MHz GALILEO E1B/C1 GLONASS L1OF 1602MHz SBAS: WAAS, EGNOS, MSAS, GAGAN

Power:

Feature	Specification
Power Supply	12V and 24V vehicles (self-adaptive)
Power Consumption	• In standby mode: 13.5 V @ 4 mA, 27 V @ 2 mA • In sleep mode (only 4G, GPS and MCU powered): 13.5 V @ 27 mA, 27 V @ 13 mA • Typical power consumption (with dual SD cards installed and SIM card for dialing): about 7 W • Full-load power consumption (with dual SD cards installed, SIM card for dialing, Wi-Fi turned on, and infrared light turned on): about 11 W <i>*All data is tested under specific laboratory conditions and may vary due to individual product differences, usage environments, and testing methods.</i>

Environmental:

Feature	Specification
Operating Temperature	-40°F to 158°F (-40°C to 70°C).
Storage Temperature	-40°F to 185°F (-40°C to 85°C).
Storage and Operating Humidity	15% to 95% non-condensing.
IP Rating	IP30 (non-waterproof).

Dimensions & Weight:

Feature	Specification
Dimensions	4.59 × 2.67 × 4.35 in (116.5 × 67.8 × 110.42 mm)
Weight	Net weight (device only): 11.04 oz (313 g) Gross weight (including accessories and package): 21.52 oz (610 g) Deviation: ±0.35 oz (±10 g)

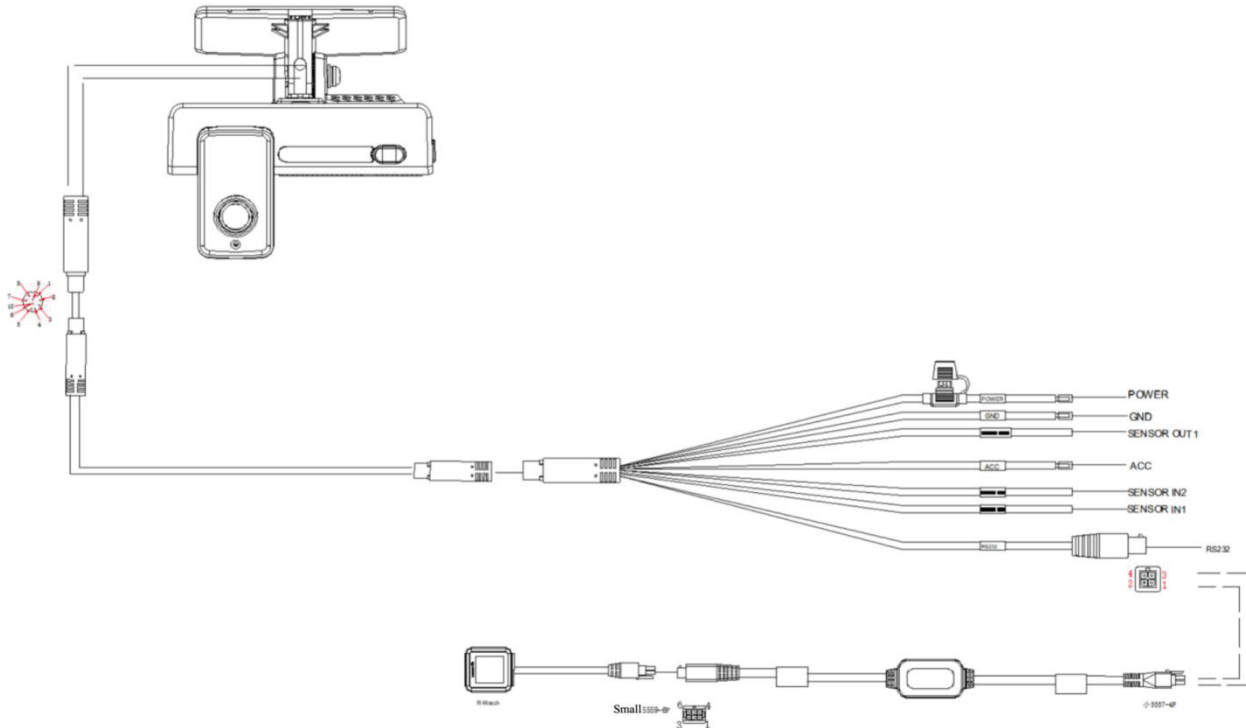
Note: Actual dimensions and weight may vary due to product differences, manufacturing processes, and testing methods.

► PACKAGING CONTENTS

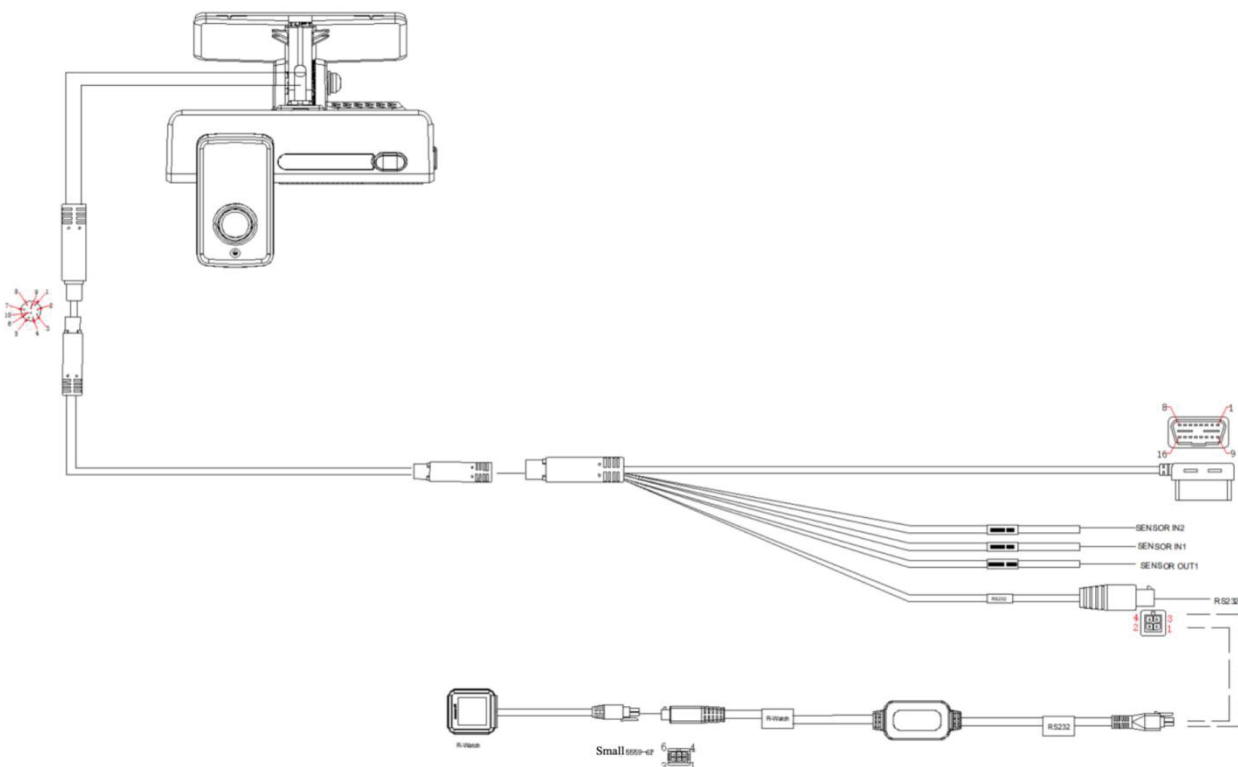
- ✓ GF-LITE-D × 1
- ✓ Standard Power Cable × 1
- ✓ Allen Key × 1
- ✓ Mounting Bracket × 1
- ✓ Bracket Bolt × 1
- ✓ Removal Tool × 1
- ✓ Alcohol Cleaning Wipe × 1

Note: The configuration may vary by region.

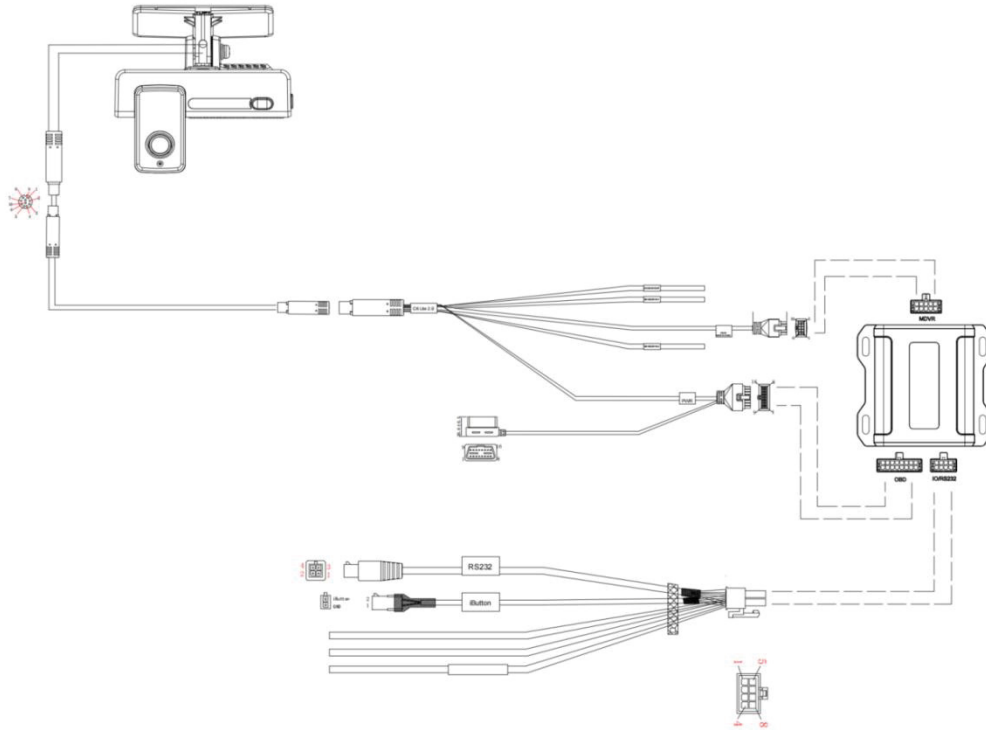
▶ ACC POWER CONNECTION SYSTEM DIAGRAM



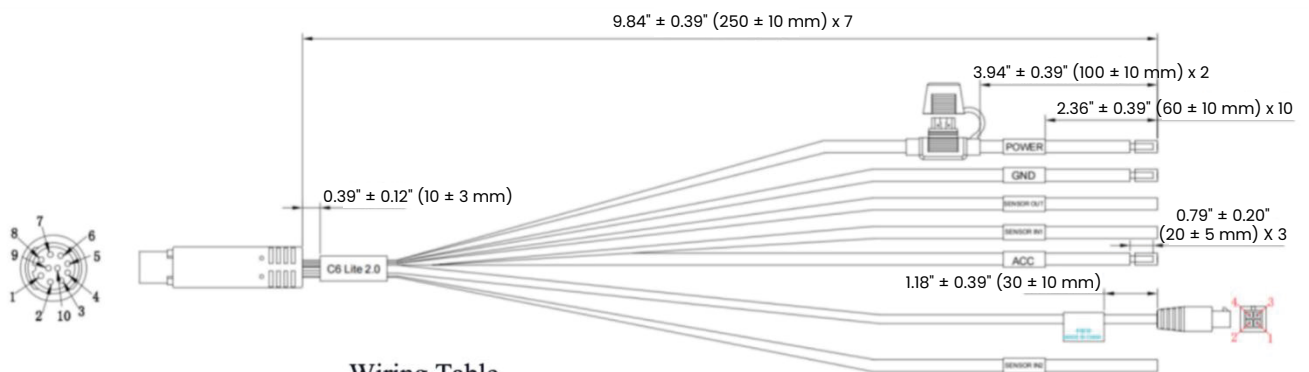
▶ OPTIONAL OBD POWER CONNECTION SYSTEM WIRING DIAGRAM



CONNECTION TO PBP SYSTEM WIRING DIAGRAM



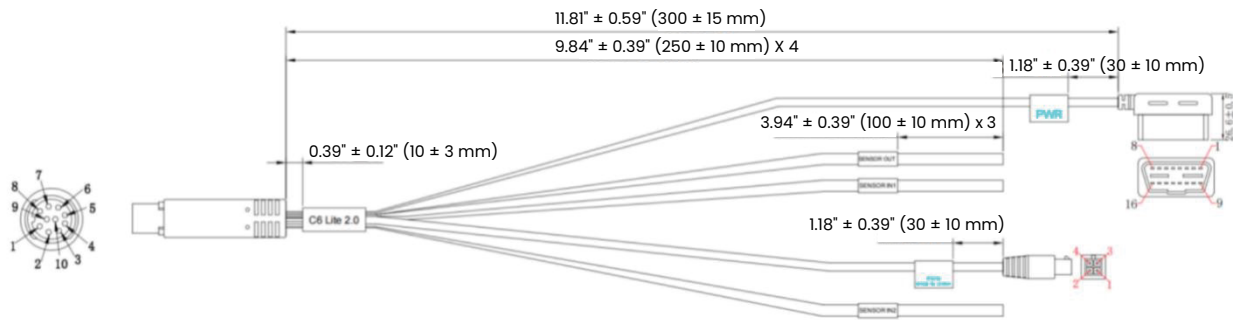
ACC CONNECTION WIRE INTERFACE DEFINITION



Wiring Table

		Suspension wire	10P BMW male port
Half Stripped	ACC	Orange wire	1 0.35 mm ²
SENSOR	OUT	Blue wire	2 0.35 mm ²
SENSOR	IN2	Green-yellow wire	5 0.35 mm ²
SENSOR	IN1	Grey wire	6 0.35 mm ²
Half Stripped	POWER	Red wire	3A Fuse Box 10 0.5 mm ²
Half Stripped	GND	Black wire	9 0.5 mm ²
		Small 5559-4P	10P BMW male port
		Black wire 4	9 GND
		Red wire 1	3 +12V
		White wire 2	7 RX (L)
		Yellow wire 3	8 TX (H)

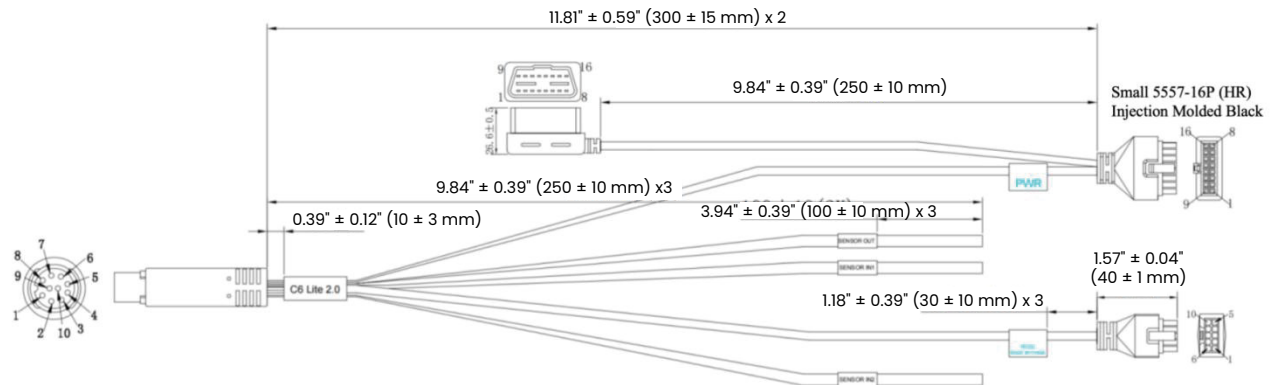
OBD CONNECTION WIRE INTERFACE DEFINITION



Wiring Table

Suspension wire	10P BMW male port
SENSOR OUT Blue wire	2 0.35 mm ²
SENSOR IN2 Green-yellow wire	5 0.35 mm ²
SENSOR IN1 Grey wire	6 0.35 mm ²
16P OBD plug	10P BMW male port
POWER Red wire 16	3A self-resetting fuse 10
GND Black wire 4+5	9+4
Small 5559-4P	10P BMW male port
Black wire 4	9 GND
Red wire 1	3 +12V
White wire 2	7 RX (L)
Yellow wire 3	8 TX (H)

PBP CONNECTION WIRE INTERFACE DEFINITION



Wiring Table

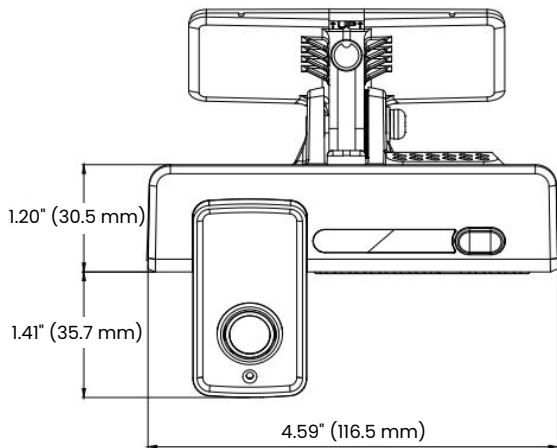
Suspension wire	10P BMW male plug
SENSOR OUT Blue wire	2 0.35mm ²
SENSOR IN2 Green-yellow wire	5 0.35mm ²
SENSOR IN1 Grey wire	6 0.35mm ²
16P OBD plug	10P BMW male plug
POWER Red wire 16	3A self-resetting fuse 10
GND Black wire 4+5	9+4
Small 5557-10P	10P BMW male plug
Black wire 7	9 GND
TX Red wire 8	7 RX (L)
RX Yellow wire 9	8 TX (H)

Wiring Table

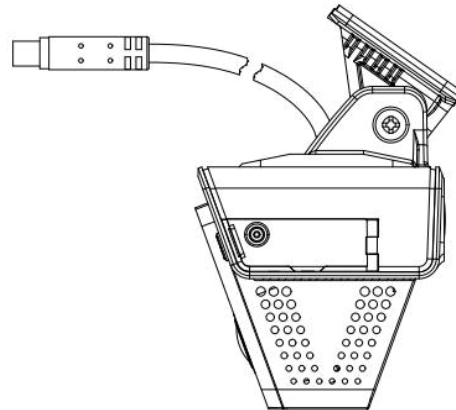
Small 5557-16P	16P OBDII male plug
J1850 bus Orange wire	1 2
CAN1-H Yellow wire	2 3
CAN0-H Blue wire	3 6
L-LINE Green wire	4 15
J1708 bus Brown wire	5 12
GND Black wire 7+8	4 22AWG
J1850 bus Orange-white wire	9 10
CAN1-L White wire	10 11
CAN0-L Blue-white wire	11 14
J1708 bus Brown-white wire	12 13
K-LINE Green-white wire	13 7
12V Red wire	15 5A self-resetting fuse 16 22AWG
GND Black wire	16 5 22AWG

▶ PRODUCT DIMENSIONS

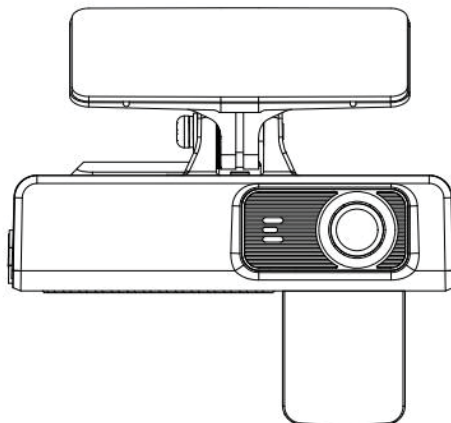
Front view



Right view



Rear view



Left view

