ZenduCAM LITE

Specification

Document Type		Confidentiality	
Product Specifications		Direct to customers	
Version			
V 1.0		* pages in total	

Drafted By	
Approved By	

Revision History

Date	Version	Description	Author
2022/4/26	V1.0	First draft	Zhang Dao
2022/5/5	V1.1	Modify product specifications and dimensional drawings	Wang Xiaoyong

Product Overview

As a professional, user-friendly and cost effective dash camera with built-in AI processor, ZenduCAM LITE supports 2-channel 2K UHD video recording, dual Micro SD card storage, and dual-stream video recording. It can record road conditions and driver conditions in real time. In addition, it can upload video in real time to a monitoring platform that can be reviewed by fleet managers to help fleets guide drivers and reduce traffic risks.

Product Features

- 2MP resolution with 143° DFOV for road facing camera, 2MP resolution with 170° DFOV for cabin camera
- Support up to 2-channel video recording, H.264/H.265 video coding
- Dual Micro SD card storage, supporting dual-stream recording
- Built-in Wi-Fi and 4G module
- Support 4-channel I/O input, 1 channel CAN and 1 channel RS232
- Compact Design
- Support OBD powering, easy installation
- Support sleep mode (power consumption less than 0.1W)
- Support echo suppression algorithm to improve the quality of two-way voice intercom
- 6-axis gravity sensor detects intense driving behaviors (Harsh Acceleration, Deceleration, Sharp turn & Accident detection)

Specifications

| Product Model: ZenduCAM LITE	
System	Embedded Linux
Language	Support Chinese, English, Spanish, Portuguese, French, Russian, Japanese
Video/Audio	
Video/Audio Recording	2 channels for video, 1 channel for audio input
Total Resources	1080@25fps (Front Lens) + 1080P@25fps (Cabin Lens)
Image Setup	Adjustable brightness, chroma, contrast, color saturation, and sharpness
Video Coding	H.264 /H.265 (default: H.265)
Audio Compression Standard	ADPCM/G.711/G.726 (default: ADPCM)
CBR/VBR	Supported. VBR or CBR (optional), VBR by default
Audio	Built-in MIC
Loudspeaker	Built-in MIC Speaker
Road facing Camera Parameters	
Sensor Type	1/2.8" 2-megapixel CMOS sensor
Shutter Speed	1/30s-1/100000s
Lens	2.6mm HFOV: 114° VFOV: 77° DFOV: 143°
Minimum illumination	Color: 0.05Lux/F1.2
Lens Mount	MDVR built-in lens

Wide Dynamic Range (WDR)	Digital WDR		
Backlight Compensation	Supported		
Signal-to-Noise Ratio (S/N)	≥48dB		
Cabin Camera Parameters			
Sensor Type	1/2.9" 2-megapixel CMOS sensor		
Shutter Speed	1/30s-1/100000s		
Lens	2.2mm HFOV: 151° VFOV: 84° DFOV: 170°		
Lens Mount	MDVR built-in lens		
Wide Dynamic Range (WDR)	Digital WDR		
Backlight Compensation	Supported		
Signal-to-Noise Ratio (S/N)	≥45db		
LED Indicator Status			
1. Power Status Indicator	Off/Blue	4. Network Status Indicator	Off/Red
2. Alarm Indicator	Off/Red	5. WiFi Status Indicator	Off/Red/Green
3. GPS Signal Indicator	Off/Red	6. Recording Status Indicator	Off/Red
Storage			
Micro SD card	Support two Micro SD cards, with the maximum capacity of a single card is 256 GB		
Sensor			
Six-axis Sensor	Supported, Harsh Acceleration, Deceleration, Sharp turn & Accident detection		
Engine Data Page			
CAN Data Collection	Supported		
Port			
RS232	1		
IO Port	4-channel input		
CAN	1		
USB	1 × mini USB port		
Network			
WIFI	Support 2.4G (IEEE Std.802.11a/IEEE Std.802.11b/ IEEE Std.802.11g /IEEE Std.802.11n)		
4G	Supported For North America: EC25AFXGA-128-SGAS LTE FDD: B2/B4/B5/B12/B13/B14/B66/B71 WCDMA: B2/B4/B5 For Europe and Asia: EC25-EC LTE FDD: B1/B3/B7/B8/B20/B28A		

|	WCDMA: B1/B8 GSM: B3/B8 For Latin America: EC25AUXGA-128-SGNS LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28 LTE TDD: B40 WCDMA: B1/B2/B5/B8 GSM: B2/B3/B5/B8
Positioning	
GPS	Supported GPS L1 1575.42MHz BDS B1 1561.098MH GALILEO E1B/C1 GLONASS L1OF 1602MHz SBAS: WAAS, EGNOS, MSAS, GAGAN
Protocol	
Network Protocol	HTTP,TCP,ARP,UDP,FTP,DHCP,DNS,IPV4,NTP
Power Related	
Power Supply	9-36V
Built-in Battery	Not supported
Power Consumption	Typical power consumption < 7 W, maximum power consumption ≤ 9 W
General Specifications	
Dimensions	113.0 mm (length) × 67.8 mm (width) × 88.2mm (height, without bracket)
Weight	MDVR: 306 g MDVR + bracket + screw + power supply box + power tail cable: 590 g
Operating Temperature	-40°C - +70°C (-40°F - +158°F)
Storage Temperature	-40°C - +85°C (-40°F - +185°F)
Humidity	15% - 90%

Certification Information

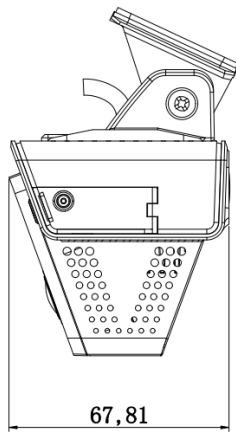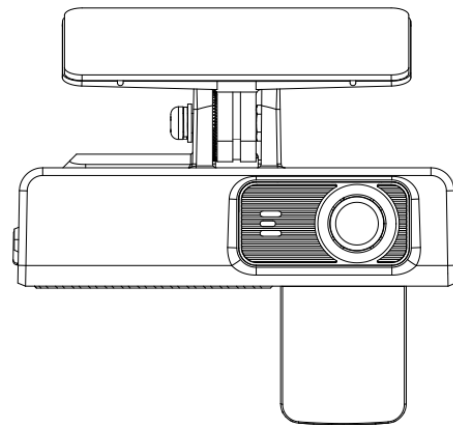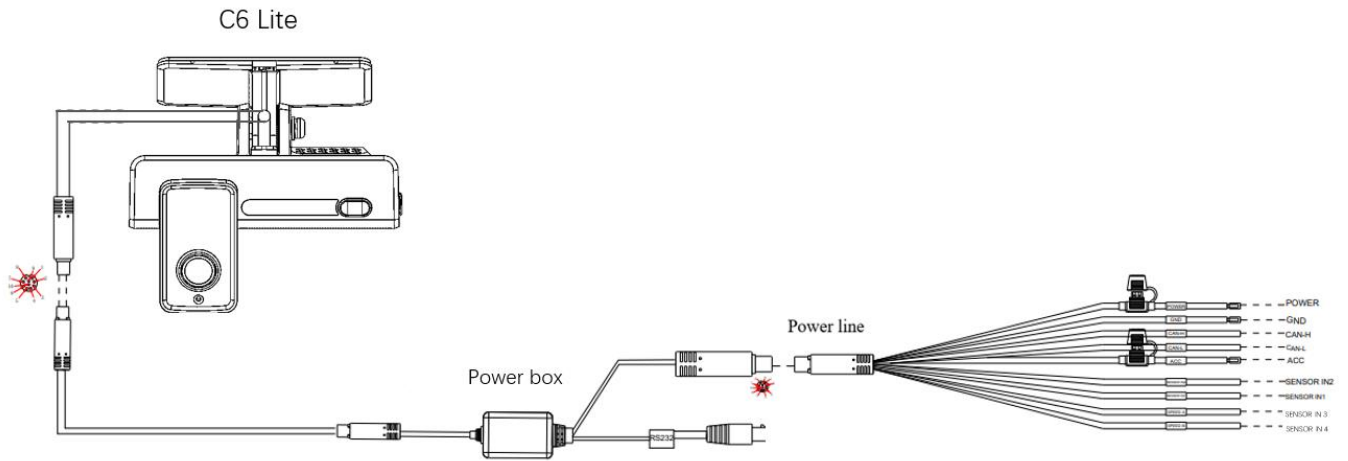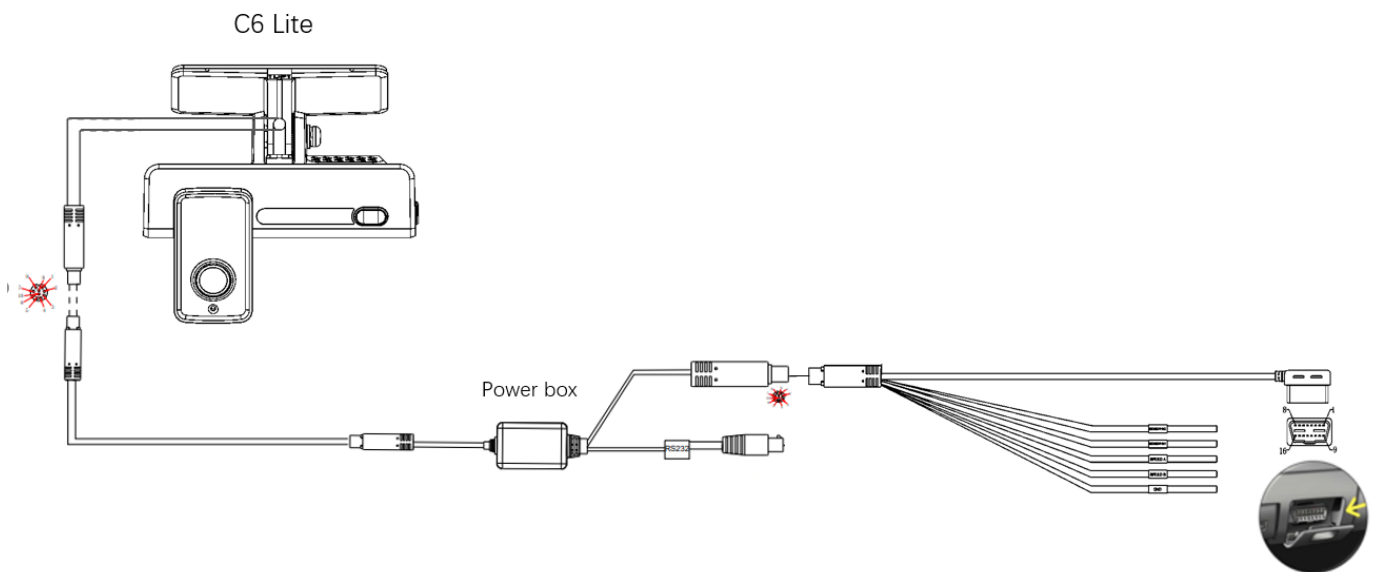| Certification	Time
Emark	
CE-EMC	
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PTCRB	
ROHS	
REACH	
EN50155	
AT&T	
Verizon	
CE-RED	
UKCA	

Dimensions (mm)
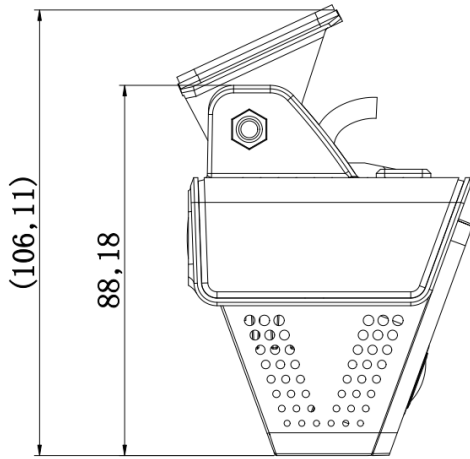
Left view
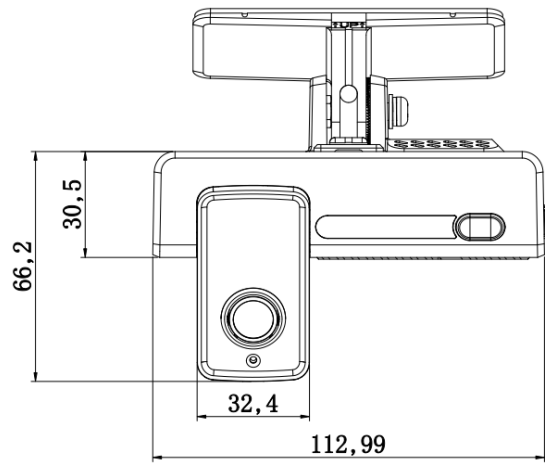
Front view

Right view

Rear view

System Connection Diagram

(1) System connection diagram for power supply through loose wire

C6 Lite
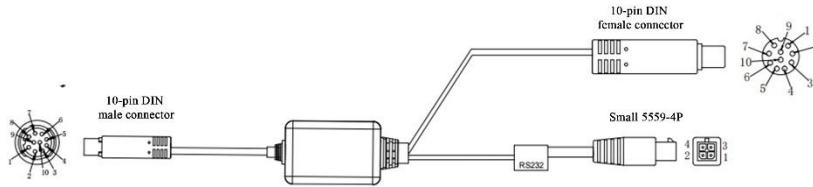

POWER
GND
CAN-H
CAN-L
ACC
SENSOR IN2
SENSOR IN1
SENSOR IN 3
SENSOR IN 4

Power line

Power box

(2) OBD wiring diagram

C6 Lite

Power box

Cable Connector Pinouts

（1）Power supply box connector pinout

Pinout

TJC3-12PIN-P1.25 — 10-pin DIN male connector

1+2	10	DC+	Red + Red/White
3+4	9	DC-	Black + Black/White
5	8	TX	White
6	7	RX	Brown
7	6	SIN1	Purple
8	5	SIN2	Blue
9	4	3.3V	Gray
10	3	CANH	Green
11	2	CANL	Yellow
12	1	ACC	Orange

Pinout

TJC3-12PIN-P1.25 — 10-pin DIN female connector

1+2	10	GND	Black + Black/White
3+4	3	24V+	Red + Red/White
7	5	SIN1	Purple
8	7	SIN2	Brown
10	2	CANH	Green
11	1	CANL	Yellow
12	8	SPEED A	Blue
13	9	SPEED B	Gray
14	6	ACC	Orange
15	4	OBD-CHK	White

Pinout

TJC3-2PIN-P1.25 — Small 5559-4P

1	1	+12V	Pink
2	NC	+5V	Blue/White

TJC3-15PIN-P1.25 — Small 5559-4P

9	4	GND	Black
6	3	232TX	Green
5	2	232RX	Yellow

（2） Power output cable connector pinout
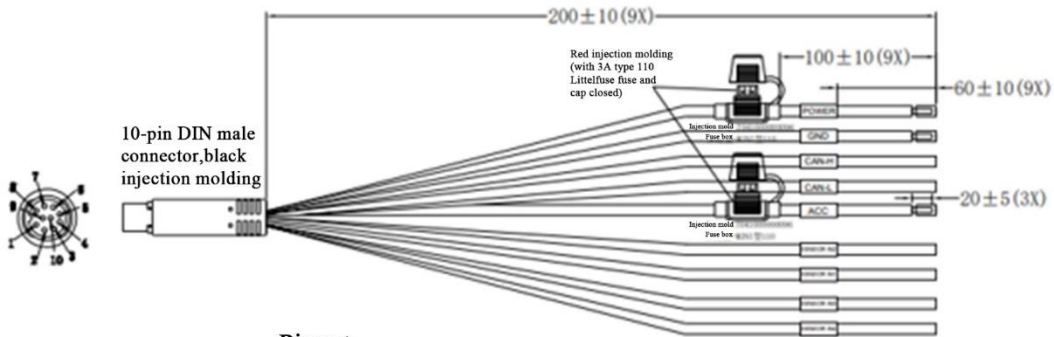
Pinout

Loose wire — 10-pin DIN male connector

Semi-stripped	ACC	Orange	3A fuse boxtt	6
	CAN-L	Yellow		1
	CAN-H	Green		2
	SENSOR IN3	Blue		8
	SENSOR IN2	Green/Yellow		7
	SENSOR IN1	Gray		5
	SENSOR IN4	Green/Black		9
Semi-stripped	POWER	Red	3A fuse boxtt	3
Semi-stripped	GND	Black		10

（3） OBD cable connector pinout
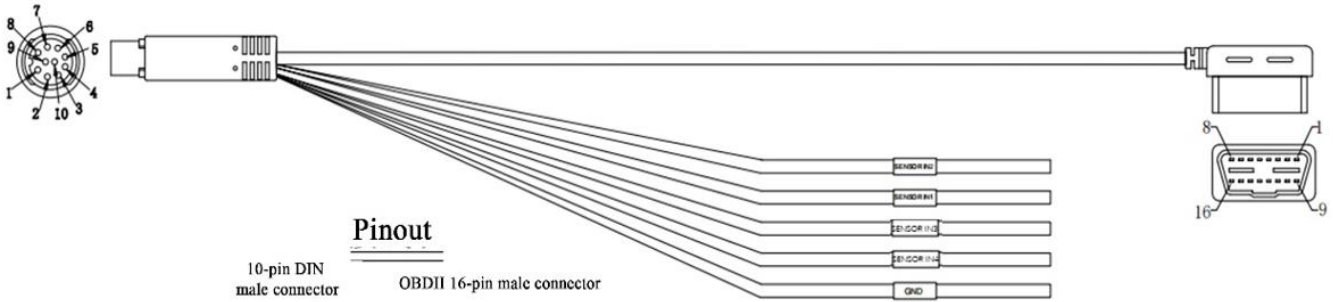
Pinout

10-pin DIN male connector   OBDII 16-pin male connector

Signal	DIN		OBDII
GND Black	10+4	————	4+5
CAN-H Green	2	————	6
CAN-L Yellow	1	————	14
POWER Red	3	3A resettable fuse	16
SENSOR IN3 Green/Yellow	8	————	
SENSOR IN2 Blue	7	————	
SENSOR IN1 Gray	5	————	
SENSOR IN4 Green/Black	9	————	
CND Black	10	————	