



FTDC-ADL-3CH • AI Dashcam Technical Datasheet



FTDC-ADL-3CH

Connected 3-Channel Dashcam (ADAS + DSC)



Wide-Viewing Angle



3-Channel



Connected



Dual SD Storage



Wake Up on Demand



OBD Plug & Play



Product Summary

The FTDC-ADL-3CH is a connected 3-channel camera system designed for comprehensive monitoring and safety. It includes a forward-facing camera for the driver's view, an inside built-in camera for cabin monitoring, and a third camera for continuous driver state monitoring (DSM) to prevent incidents caused by distractions. The versatile third camera can also be used for rear, load space, or side views. The device supports dual-stream video recording, allowing simultaneous preview and live streaming in a data-efficient manner. Full HD (1080P) video can be downloaded upon request.

With dual Micro SD card storage of up to 512GB, the system offers approximately 34 hours of recording capacity in full HD and 140 hours of recording in SD. An in-vehicle AHD monitor can be added for side, rear, or load space monitoring. The built-in 100Hz 6-Axis accelerometer sensor detects poor driver behaviour, assisting fleet managers in improving road safety and reducing operational risk.

The front camera of our system actively monitors various risk events on the road ahead, including lane departure warning, forward collision warning, and headway monitoring warning. It also detects unsafe driving behaviour such as unfastened seatbelts, mobile phone usage, yawning, distractions, and smoking.

Key Features:

- Built-in ADAS and DSC/DSM for AI event detection
- ADAS CH1 1080P - DFOV 140°; DSC CH2 1080P – DFOV 170°;
- 2MP – Third Channel
- H.264/H.265 video encoding
- Dual Micro 256G SD card storage (512GB)
- Dual-stream recording HD and SD
- Built-in Wi-Fi and 4G/LTE module
- Compact Design and Easy Installation with OBD Power
- Support sleep mode, remote wake-up
- Two-way voice intercom (Optional)
- 6-Axis Accelerometer Sensor for better driving behaviour Analysis

Active Safety Features

Fleetly FTDC-ADL-3CH uses machine vision-based on Video Analysis technology to automatically identify road risks and drivers' unsafe driving behaviours. Detected events will trigger audible and visual reminders to alert drivers in real time, event recordings will be uploaded to the cloud simultaneously.

ADAS Features



LDW

(Lane Departure Warning)



HMW

(Headway Monitoring Warning)



FCW

(Forward Collision Warning)

DSC Features



Unfastened seat belt



Using mobile phone



Yawning



Distraction



Smoking

Optional accessories for active safety DMS Features



A-pillar DMS



Driver Notified (R-Watch)



Lens Covered



Fatigue



Phone Call



Smoking



Distraction



No driver detected



Unfastened seat belt



Yawning

Technical Specification

Product Model

Model	FTDC-ADL-3CH
System	Embedded Linux
Language	Support Chinese, English, Spanish, Portuguese, French, Russian, Japanese

Video/Audio

Video/Audio Recording	3-channel video (default: 2-channels; extensible: 1-channel IPC) + 1-channel audio
Maximum Resources	2MP @20fps (ADAS) +1080P @20fps (DSC)+1080P @20fps (IPC)
Image Setup	Adjustable brightness, Chroma, contrast, colour 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 3W loudspeaker

ADAS Camera Parameters

Sensor Type	1/2.8" 2-megapixel CMOS sensor
Shutter Speed	1/30s-1/100000s
Lens	4mm HFOV: 84°

	VFOV: 45° DFOV: 96°
Minimum illumination	Colour: 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: 154° 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

Power Status Indicator	 Off/Blue
Alarm Indicator	 Off/Red
GPS Signal Indicator	 Off/Red
Network Status Indicator	 Off/Red
Wi-Fi Status Indicator	 Off/Red/Green
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
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Sensor

Six-axis Sensor Supported

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
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Protocol

Network Protocol	HTTP, TCP, ARP, UDP, FTP, DHCP, DNS, IPV4, NTP
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Power Related

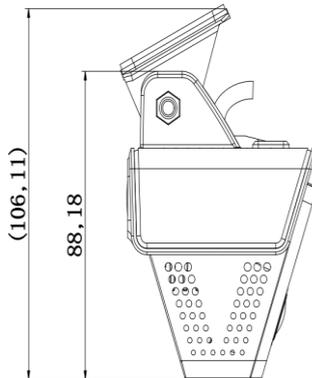
Power Supply	9-36V
Built-in Battery	Not supported
Power Consumption	Typical power consumption <8 W, maximum power consumption <12 W

General Specifications

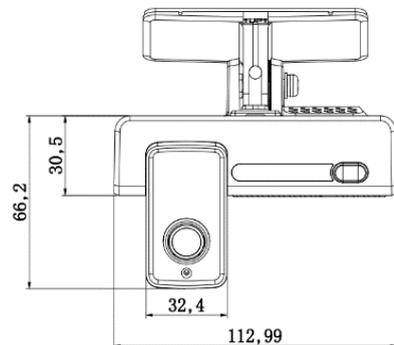
Dimensions	113.0 mm (length) × 67.8 mm (width) × 88.2mm (Height, without bracket)
Weight	760g
Operating Temperature	-40°C - +70°C (-40°F - +158°F)
Storage Temperature	-40°C - +85°C (-40°F - +185°F)
Humidity	15% - 90%

Dimensions

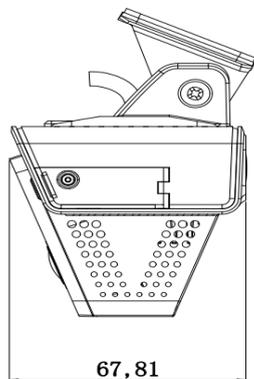
Unit (mm)



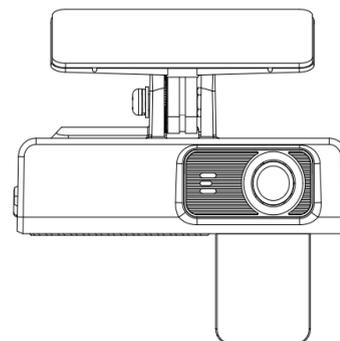
Left view



Front view

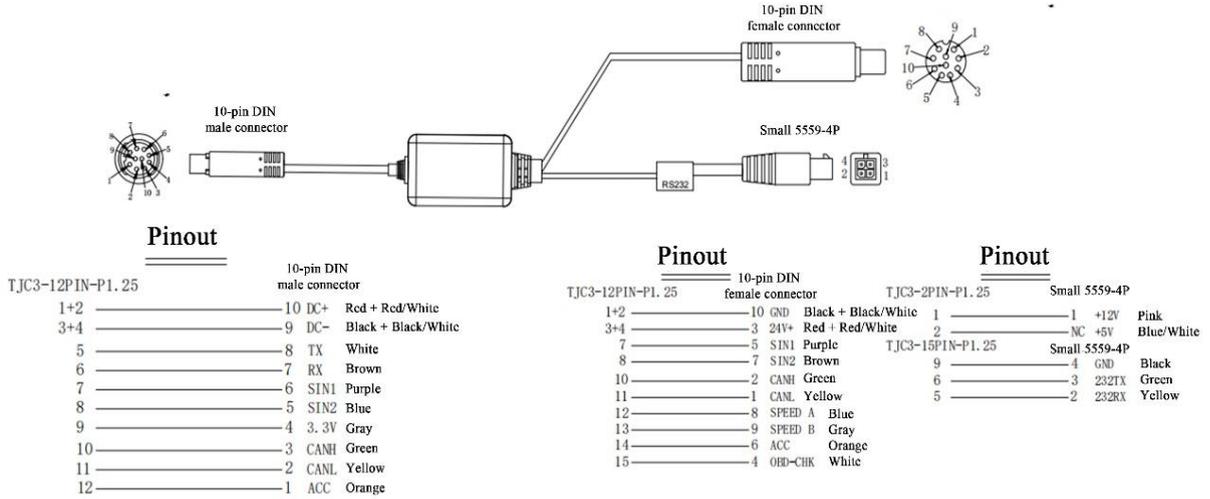


Right view

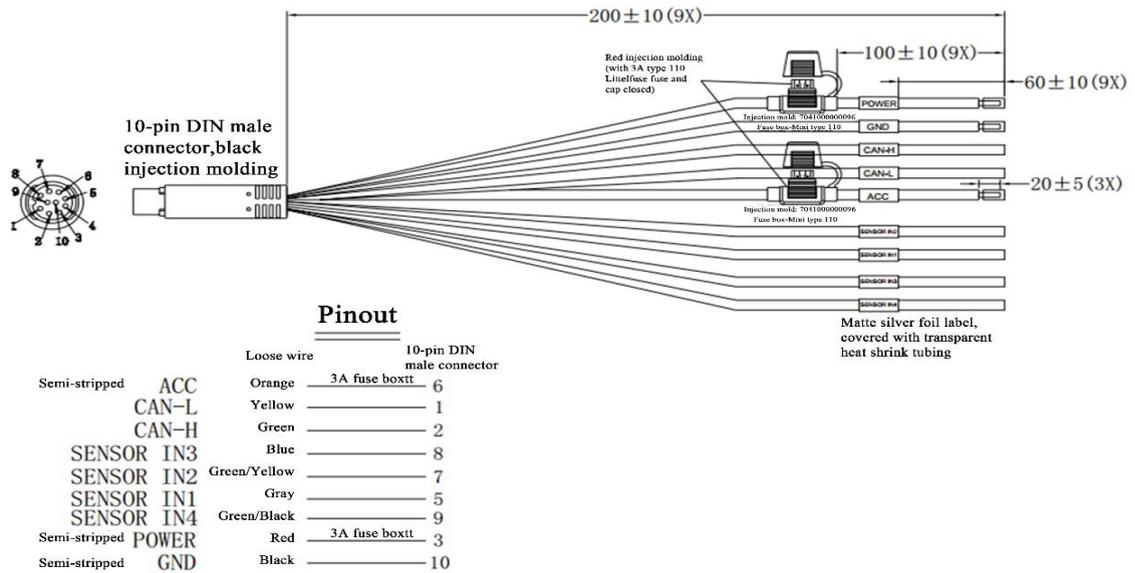


Rear view

Power supply box connector pinout



Power output cable connector pinout



OBD cable connector pinout

