



JC451

Multi-Channel AI CamBox

The JC451 is a remote video monitoring terminal designed specifically for commercial vehicles. It features a built-in antenna system for easy cabling. It can be connected to up to 5 cameras to provide fleet managers with full visibility of the vehicle, including the road ahead, the driver, the sides and the road behind. The main unit can simultaneously support the operation of two integrated visual algorithms-ADAS and DMS-that constantly monitor the following distance, lane keeping and driver alertness. This ensures that the driver and fleet manager are immediately alerted to any potential hazards making the road safer. In addition, the JC451 also features multiple alerts such as SOS, making it a suitable and applicable solution for managing public transportation, logistics vehicles hazmat transport vehicles school buses and more.



Logistics Service



Hazmat Trucking



Passenger Transport Service



School Bus Service



Video Surveillance

Powerful LTE connectivity enables the live monitoring of the vehicle's interior and exterior via an online platform; while the critical video clips in the device allows for on-demand playback after the fact from anywhere, at any time.



Multi-Channel Recording

Multiple cameras can be configured to monitor various angles, providing a fuller view of the vehicle and its surroundings.



Visual AI Algorithms

The device uses a variety of AI algorithms, such as ADAS and DMS, to provide tools that help improve road safety and driver safety and compliance.



Split-System Design

The main unit is independent of the cameras, that is, it houses no cameras to protect itself from being exposed and for discreet installation; while the antennas are built inside to simplify cable routing.



Multiple Alerts

Record and upload video clips or still images of customizable events such as speeding and SOS button activation.



Vehicle Immobilization

Enable you to cut off the fuel/power to the vehicle moving under 20km/h using Tracksolid Pro, which is useful if your fleet vehicle has been stolen.



Extension Interface

Various ports such as RS232 and TTL provide support for optional accessories such as fuel and temperature sensors.



Expanded Storage

Dual microSD card slots provide a maximum of 512GB on-device storage, allowing for up-to-7-day 5 cameras recording simultaneously.

Specifications

Cellular

Technology	4G LTE Cat 4, 3G (WCDMA), 2G (GSM)
	JC451-EUX:
	FDD-LTE: B1/B3/B7/B8/B20/B28A
Frequency	TDD-LTE: B38/B40/B41
	WCDMA: B1/B8
	GSM: B3/B8

GNSS

Positioning system	GPS, BDS
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Camera

Camera support	Max. 5 (1*1080P + 4*720P), refer to Optional Configuration*
Video format	.ts

Power

Input voltage	DC 9~30V
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Operating environment

Operating temperature	-20°C to +70°C
Storage temperature	-30°C to +85°C

Interface

LED indication	Red (Power), Blue (Cellular), Green (GNSS)
SIM	Nano-SIM
External memory	TF card (up to 256GB*)
USB	Type-C
WiFi	2.4GHz, Support AP Mode/STD Mode/WiFi Direct
Bluetooth	BLE 4.0
Microphone	Support
Speaker	Support
Digital I/Os	2: SOS*2, 1* Relay, 2*Reserved inputs
Analog I/Os	1*CVBS-OUT
Serial ports	1*RS232, 1*TTL
Sensor	3-Axis accelerometer

Feature

ADAS	FCW, HMW, LDW
	Phone use, Smoking, Distraction, Yawning, Eyes closed, No face detected
DMS (optional)	
Configuration support	GPRS, SMS, Memory card, APP
Firmware update	USB cable, Memory card, OTA
Certification (planning)	CE

Physical specification

Dimensions	118.0 x 97.0 x 32.0mm
Weight	350g

Standard Packing

JC451 unit	1	Double-sided adhesive	1
Power cable	1	Screws	3
SOS button	1	Screwdriver	1
Mount base	2		

Optional Configuration*

Peripheral camera	CI01: 1280x720/15FPS/F2.0/Color in daytime & mono in dim light/100° (HFOV) CI03: 1280x720/15FPS/F2.4/Color in daytime & mono in dim light/119° (HFOV) CI04: 1280x720/15FPS/F2.4/Color in daytime & mono in dim light/119° (HFOV) CD02: 1280x720/15FPS/F2.0/Monochrome/56° (HFOV) CE01: 1280x720/15FPS/F2.0/Full color/IP67/125° (HFOV) CE02: 1280x720/15FPS/F2.0/Full color/IP67/111° (HFOV) CF01F: 1920x1080/25FPS/F2.0/Full color/82° (HFOV) CF02F: 1920x1080/25FPS/F2.0/Full color/82° (HFOV)
Relay	12V or 24V

*Optional Configuration required to be customized or purchased separately.