



# 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

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

### GNSS

<b>Positioning system</b>	GPS, BDS
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### Camera

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

### Power

<b>Input voltage</b>	DC 9–30V
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### Operating environment

<b>Operating temperature</b>	–20°C to +70°C
<b>Storage temperature</b>	–30°C to +85°C

### Interface

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

### Feature

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

### Physical specification

<b>Dimensions</b>	118.0 x 97.0 x 32.0mm
<b>Weight</b>	350g

## Standard Packing

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

## Optional Configuration\*

<b>Peripheral camera</b>	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)
<b>Relay</b>	12V or 24V

\*Optional Configuration required to be customized or purchased separately.