

IDD-213L Technical Specification

1 Description



IDD-213L is an intelligent on-board diagnostic device compatible with passenger and commercial vehicles, it features plug-and-play technology, could read diagnostic info from vehicle ECU and capture location data, then send them to backend server for real-time remote diagnostic and tracking purpose.

IDD-213L can also act as an in-Vehicle Wi Fi hotspot, up to 8 Wi Fi enabled devices can be connected to share high speed 4G LTE network.

2 Features

- ◆ Industrial class components with high quality
- ◆ OBD II/EOBD, J1939 and J1708 compliant
- ◆ Plug & Play technology
- ◆ Comprehensive data collection and analysis, including diagnostic data, location data and driving behavior data
- ◆ 4G LTE In-Vehicle Wi Fi hotspot
- ◆ AES-128bit encryption

3 Functions

- ◆ Real-time tracking
- ◆ Read diagnostic data, including vehicle speed, RPM, ECT etc.
- ◆ Read diagnostic trouble codes and freeze frame data
- ◆ Mileage statistic
- ◆ Fuel consumption statistic
- ◆ Driving behavior monitoring, including speeding, hard acceleration, hard deceleration, excessive engine idle time etc.
- ◆ Support passenger car / heavy duty / tracker mode
- ◆ Up to 96,000 GPS data storage
- ◆ Data reporting according to time interval, distance and heading change
- ◆ Ignition on/off detection
- ◆ Vehicle battery monitor
- ◆ Base station ID report (when no GPS signal)
- ◆ 4G LTE mobile hotspot, connect up to 8 Wi Fi enabled devices

- ◆ Alarms and events
 - ◇ Engine on/off
 - ◇ High engine coolant temperature
 - ◇ Speeding
 - ◇ High RPM
 - ◇ Hard acceleration
 - ◇ Hard brake
 - ◇ Sharp turn
 - ◇ Quick lane change
 - ◇ Crash
 - ◇ Low battery voltage
 - ◇ Excessive engine idle time
 - ◇ Towed
 - ◇ Vibration
 - ◇ Plug indication
 - ◇ Fatigue driving
 - ◇ MIL on/off
- ◆ SMS alarm to user phone
- ◆ Connect backend server via domain or IP address
- ◆ Google Map link in location SMS
- ◆ OTA FW update

4 Application

- ◆ Fleet management and vehicle tracking
- ◆ Car service shop
- ◆ Vehicle insurance
- ◆ Car rental

5 Technical Specification

Mechanical	Size	63mm (L) x 50mm (W) x 26mm (H)
	Weight	50g
Interface		OBD interface: 16 pin standard OBD II Configuration interface: Micro USB SIM card interface: Micro SIM, Push-Push Type
Data transmission		Packet data (GPRS/HSPA/LTE) and SMS
Positioning method		GPS
Storage		8MB FLASH, up to 96,000 GPS data storage
OBD protocol		ISO 9141-2 ISO 14230-4 ISO 15765-4 SAE J1939 SAE J1587/J1708
Power	Working	9-36VDC

	Voltage	
	Working Current	Max. : <200mA@13.8/27.6VDC Average: <150mA@13.8/27.6VDC Sleep mode: <10mA@12/24VDC
	GPS	Channels: 66 Sensitivity: -165dBm Accuracy: 5m CEP Time to first fix: Cold start: <30s (typ.) Hot start: <1s (typ.)
	Wi Fi	Frequency: 2.4-2.4835GHz WLAN Standard: 802.11b/g/n Transmission Data: 65Mbps@802.11n 54Mbps@802.11g 11Mbps@802.11b
	Cellular	Frequency (IDD-213LC, China): FDD LTE B1/B3/B8 TDD LTE B38/B39/B40/B41 TD-SCDMA B34/B39 WCDMA/HSPA+ B1/B8 GSM/GPRS 900/1800MHz Frequency (IDD-213LE, Europe): FDD LTE B1/B3/B5/B7/B8/B20 TDD LTE B38/B40/B41 WCDMA/HSPA+ B1/B5/B8 GSM/GPRS 900/1800MHz Frequency (IDD-213LA, US): FDD LTE B2/B4/B12 WCDMA/HSPA+ B2/B4/B5 Data: LTE-FDD Max 150Mbps (DL) Max 50Mbps (UL) LTE-TDD Max 130Mbps (DL) Max 35Mbps (UL) HSPA+ Max 42Mbps (DL) Max 5.76Mbps (UL) Network protocol: Embedded TCP/IP stack
	6-axis IMU	Driving behavior detection
	LED Indication	GPS/Cellular/OBD indication
Antenna	Cellular	Internal
	GPS	Internal
	Wi Fi	Internal
Accessories		OBD II extension cable 9-Pin deutsch wiring harness

		6-Pin deutsch wiring harness Power cable
Environment	Working Temperature	-30°C ~ +70°C
	Storage Temperature	-40°C ~ +85°C
	Humidity	5%~95% (no fog)