IDD-213G Technical Specification

1 Description

IDD-213G 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.

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

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 24,000 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)

◆ Internal battery for unplug notification

◆ Alarms and events

   ◇ Engine on/off

   ◇ High engine coolant temperature

- ◇ Speeding

- ◇ High RPM

- ◇ Hard acceleration

- ◇ Hard brake

- ◇ Low battery voltage

- ◇ Excessive engine idle time

- ◇ Towed

- ◇ Plug indication

- ◇ Unplug notification

- ◇ Fatigue driving

- ◇ Excessive exhaust emission

- ◇ MIL on/off

- ◇ Emergency

- ◆ SMS alarm to user phone

- ◆ Connect backend server via domain or IP address

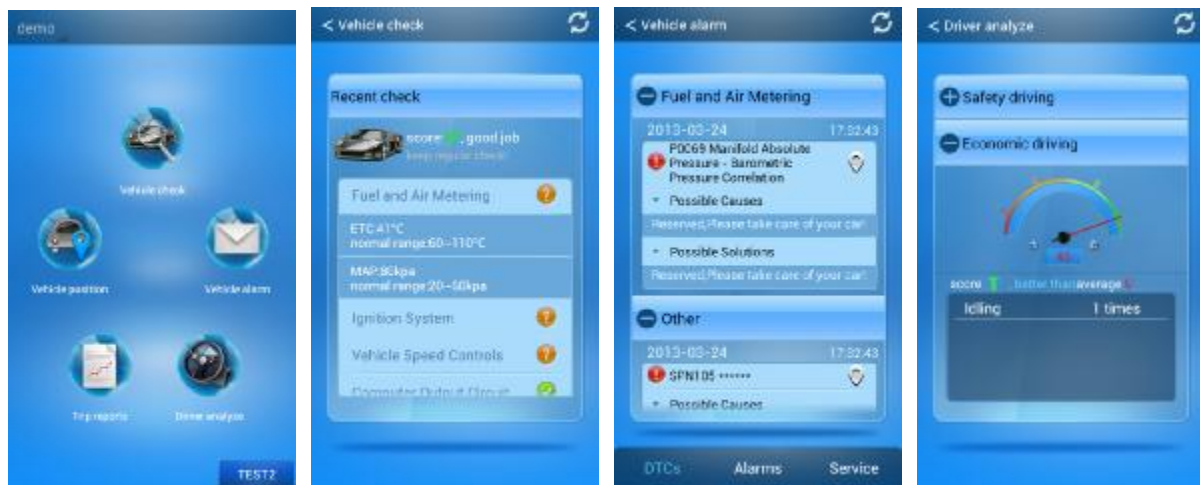- ◆ Google Map link in location SMS

- ◆ OTA FW update

4 Application

- ◆ Fleet management and vehicle tracking

- ◆ Car service shop

- ◆ Vehicle insurance

- ◆ Car rental

5 Smart phone APP

Cloud based smart phone APP, manage vehicles and drivers, supports Android and iOS system.

6 Technical Specification

Mechanical	Size	63mm (L) x 48mm (W) x 28mm (H)
	Weight	50g
Interface		OBD interface: 16 pin standard OBD II Configuration interface: Mini-USB SOS button interface: MMCX SIM card interface: Push-Push Type

Data transmission	GPRS/SMS
Positioning method	GPS/A-GPS
Storage	2MB FLASH, up to 24,000 GPS data storage
OBD protocol	SAE J1850 PWM SAE J1850 VPW ISO 9141-2 ISO 14230-4 ISO 15765-4 SAE J1939 SAE J1587/J1708

Power	Working Voltage	9-36VDC
	Working Current	Max.: <200mA@13.8/27.6VDC Average: <150mA@13.8/27.6VDC Sleep mode: <10mA@12/24VDC
	Backup battery	3.7V/160mAH

GPS	Channels: 50
	
	Sensitivity: -160dBm
	
	Accuracy: 5m CEP
	
	Time to first fix:
	
	   Cold start: <32s (typ.)
	
	   Warm start: <32s (typ.)

		Hot start: <1s (typ.)

GSM		Frequency: 850/900/1800/1900MHz
		
		Network protocol: Embedded TCP/IP stack
		
		Sensitivity: -107dBm@850/900MHz
		
		     -106dBm@1800/1900MHz
		
		Output power: Class 4 (2W)@850/900MHz
		
		     Class 1 (1W)@1800/1900MHz
		
		GPRS data: GPRS Class 10, Mobile Station Class B

3 axis Accelerometer		+/-2g, +/-4g, +/-8g, +/-16g, driving behavior detection
LED Indication		GPS/GSM/OBD indication
Buzzer		System status/Alarm indication
Antenna	GSM	Internal
	GPS	Internal
Accessories		Configuration cable OBD II extension cable 9-Pin deutsch wiring harness 6-Pin deutsch wiring harness SOS button Power Cable
Certification		CE
		E-Mark (Pending)

Environment	Working Temperature	-30℃ ~ +70℃
	Storage Temperature	-40℃ ~ +85℃
	Humidity	5%～95%（no frog）