

M210

Product specification

HOLLOO TECH.

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1、Product effect diagram



2、Product introduction

M210 is the mini OBD terminal.

Exquisite shape, compact size, high performance price ratio.

It integrates advanced GPRS communication module, high precision GPS module, high performance three axis gravity sensor and on-board ECU computer communication module. The running state of the vehicle, the vehicle condition data and fuel consumption data, the driver control data through the wireless module to upload to the car networking management cloud platform, vehicle management platform through the terminal data, vehicle trajectory, statistical driving behavior, fuel consumption statistics, such as remote anti-theft tracking and fleet management, reduce vehicle fuel consumption by regulating the driving behavior.

3、Product function

3.1、Compact design

The product is compact and does not occupy the inner space of the vehicle.

3.2、Powerful and widely applicable

Match the market with OBD standards above 90% models.

Communication management function	Dormancy	When the vehicle is out of flame for 5 minutes, it enters dormancy and reduces power consumption.
	Network disconnected reconnection	Network drop can automatically reconnect
	Communication protocol	Data information interacts with the platform using the TCP protocol.
	Parameter	Directly through the platform to the terminal

	setting	IP address, port number, APN settings, and password protection.
Positioning function	Location data	Including latitude and longitude, time, satellite number, speed, direction, ACC state, battery voltage, OBD speed.
	Base station location function	Contains network base station, LAC and Cell ID information, operator coding.
	Intelligent trajectory	The terminal automatically judges the trajectory, realizes the intelligent reporting of GPS points, and realizes the butterfly shape effect of the track.
	Report by time interval	The monitoring platform establishes the mode and frequency parameter of transmitting terminal to return the location information.
Reminder alarm function	Ignition on reminder	Vehicle ignition report, ignition alarm, including alarm time, GPS information.
	Ignition off reminder	Vehicle flameout reporting, flameout alarm, including alarm time, GPS information.
	Low voltage alarm for vehicle	The vehicle voltage is below the voltage threshold which can be set, reporting low voltage alarm, including alarm time and GPS information.
	Idle too long alarm	The idle time of the vehicle exceeds the time threshold that can be set. The idle time is reported to be too long, and the alarm time is included, and the GPS information is included.
	Water temperature alarm	For vehicles that support OBD water temperature data, the water temperature is above the set temperature threshold, and report to the water temperature alarm, including alarm time, GPS information and water temperature value at that time.
	Over Speed Alarm	Vehicle speed exceeds the speed threshold that can be set, report to over speed alarm, including alarm time and GPS information.
	Collision alarm	When the vehicle is moving, the acceleration is greater than the threshold that can be set. It is filtered by the front and rear speed, defined as a severe crash scene, reported to the collision warning, including collision time, GPS information, collision acceleration
	Trailer alarm	The trailer is reported to the trailer, including Trailer time and GPS information.

	Fatigue driving reminder	Vehicle running time is too long, automatic identification report fatigue driving reminder.
	Device insertion alarm	Insertion of terminal device, reporting, insertion, warning.
	Device pull out alarm (optional)	Pull out the terminal device and report the alarm
	Positioning time is too long	When the vehicle fires, the positioning time exceeds the set time threshold, the reporting positioning time is too long, and the alarm contains the alarm time and the GPS information.
Driving behavior	Driving behavior	Including driving cycle start time, terminal time, driving cycle, total mileage, average speed, maximum speed, over speed time, speed, idle speed, rapid acceleration, rapid deceleration, sharp turn information.
	Driving behavior event	During the running of the vehicle, the event of rapid acceleration, rapid deceleration and sharp turn occurs.
OBD Data	Vehicle data flow	Report vehicle critical data stream every 30S. The specific data items according to the vehicle data support a slightly different.
	Read Trouble Code	The terminal identifies the Trouble Code and reports the platform when the vehicle fault condition changes.
	Clear Trouble Code	Clear Trouble Code by issuing instructions on the platform.
Remote control management function	Remote upgrade	Terminal software can be upgraded remotely and upgraded via FTP server.
	Remote Reboot	Reboot by way of data channel instruction.
	Remote inquiry	The platform remotely queries the terminal information, vehicle type, GPRS communication parameters, heartbeat parameters, GPS/CAN return parameters, SIM card information, GPS information, CAN data stream, and current fault through the mobile network. All kinds of alarm parameters, urgent acceleration, and sharp deceleration, sharp turn parameters.
	Remote settings	The platform through the mobile network remote setting terminal information, vehicle

		type, GPRS communication parameters, heartbeat parameters, GPS/CAN return parameters, clear the vehicle malfunction, restart, restore factory settings, remove the blind data, a variety of alarm parameters, speeding up the rapid deceleration turn parameter.
	Version Report	Each ACC ON reports version information. The platform checks the version information of the engine through the instruction.
	SIM card information report	Every time ACC ON reports SIM card, IMEI number and so on. The platform checks the SIM card, IMEI number and so on through the instruction.
	Module checking	Terminal status self-check: to check whether the function modules (location module, bus module, FLASH and 3D module) work properly and alarm when they happen (which have nothing to do with wireless communication)
Backup power	Standby tracking and alarm (optional)	After the terminal is pulled out, the internal battery is powered, and the alarm and track position information is reported.

3.3、OBD Data

Battery voltage	Manifold pressure	Accelerator pedal position
Total mileage class	Fault lamp status	Engine running time
Total mileage	Number of fault codes	Breakdown mileage
Total fuel consumption	Coolant temperature	Remaining oil
Engine speed	Vehicle ambient temperature	Engine load
Vehicle speed	Fuel pressure	Long term fuel amendment
Air flow	Atmospheric pressure	Ignition advance angle
Intake temperature	Throttle position	Total vehicle running time

- Various models of different information, supported by the data items are different, with the actual situation of vehicles for support.

4、Protocol support

4.1、Network communication protocol

TCP protocol

4.2、OBD communication protocol

ISO-15765 500K ST

ISO-15765 500K EX

ISO-15765 250K ST

ISO-15765 250K EX

ISO-14230 FAST

ISO-14230 SLOW

ISO-9141-2

5、Performance parameter

Performance parameter			
Size		49*25*32mm (Length *width *height)	
working voltage		9V-16V DC	
Average operating current		120mA@12V	
Sleep working current		5mA@12V	
Working temperature		-30℃～+70℃	
Storage temperature		-40℃～+85℃	
Positioning accuracy		<10m	
GPS frequency range		GSM 900/1800	
GSM antenna		Built-in	
GPS antenna		Built-in	
GPS Receiver			
Cold boot time (average)	<30s	Receiver type	L1 frequency, C/A Code 50 channel
Hot boot time (average)	<1s	Receiving sensitivity	<-161dB. Typical
positioning accuracy	<10m	Speed accuracy	<0.1 m/s
GSM Receiver			
GSM	SIMCOM 800L	Receiving sensitivity	<-107dBm
Protocol	GSM/GPRS Phase2/2+	GPRS technical specifications	GPRS CLASS 10/8
Receiving frequency	EGSM900/GSM1800	Maximum transmit power	EGSM900/GT800 CLASS4(2W)

		GSM1800 CLASE1(1W)
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6、Interface definition

6.1、OBDII connector

OBDII			
No.	Pin definition	No.	Pin definition
1	NC	9	NC
2	NC	10	NC
3	NC	11	NC
4	GND	12	NC
5	GND	13	NC
6	CAN High	14	CAN Low
7	K Signal	15	L Signal
8	NC	16	POWER

Conforms to the international OBDII standard interface, no broken line, plug and use.

6.2、SIM card replaceable

6.3、Indicator light

①GREEN - GPS; ②BLUE - Communication; ③ORANGE - GPRS

FCC Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help important announcement

Radiation Exposure Statement

To comply with FCC RF exposure compliance requirements, this grant is applicable to only mobile configurations. The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.