LW2G-12F
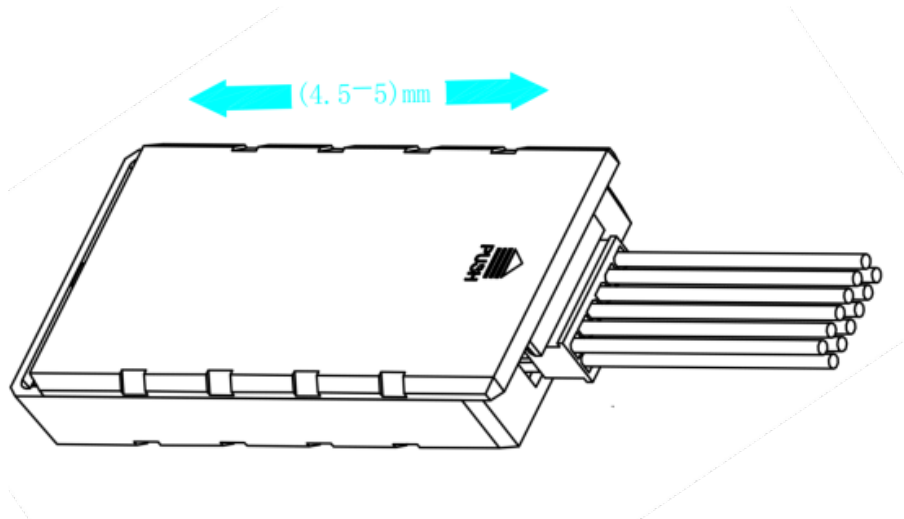
12 线 **GNSS/GSM** 终端
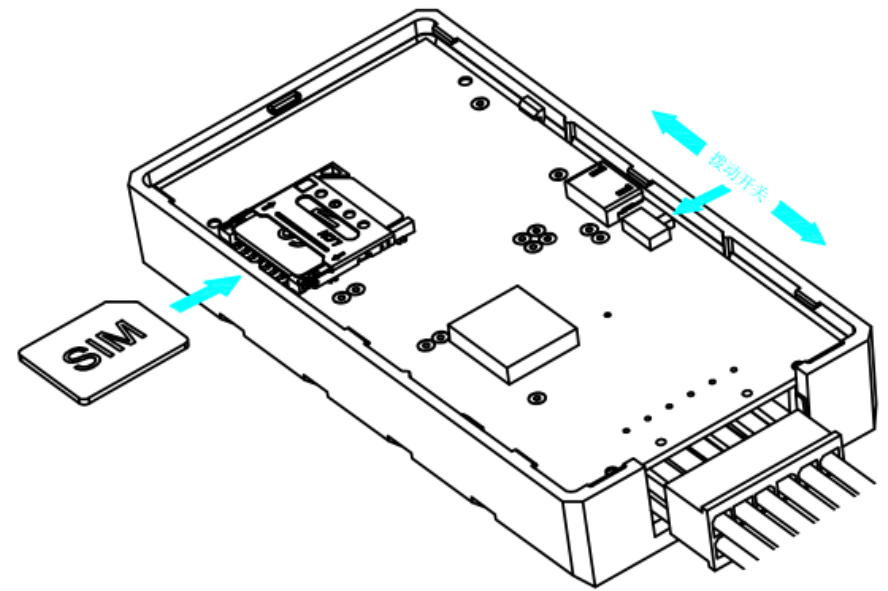
12-Wire GNSS/GSM TERMINAL

(4. 5−5)mm
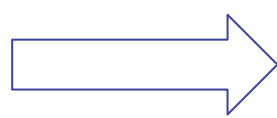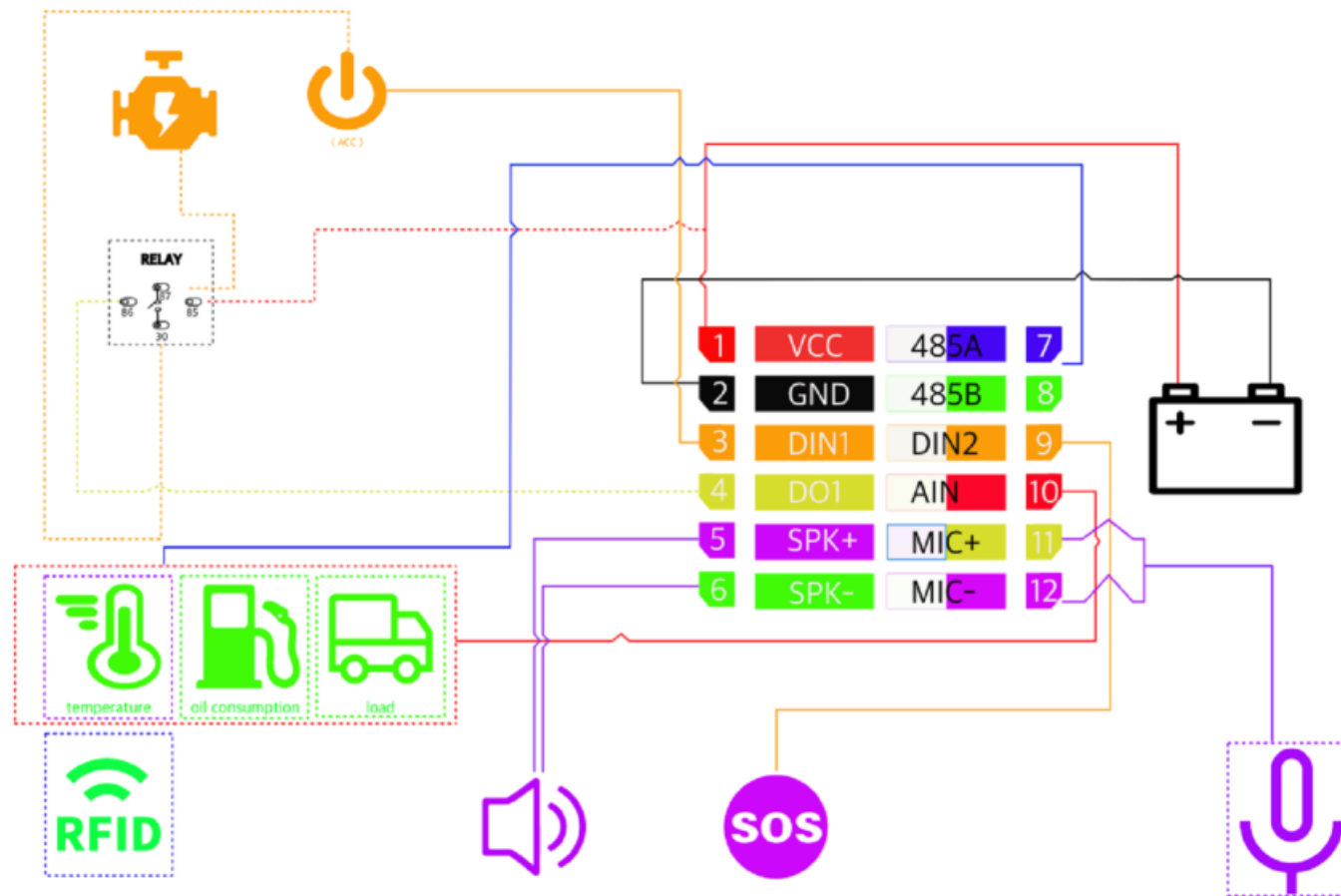
Slide to open

Assembly the SIM card and turn on the switch

Wiring Scheme

1	VCC	485A	7
2	GND	485B	8
3	DIN1	DIN2	9
4	DO1	AIN	10
5	SPK+	MIC+	11
6	SPK-	MIC-	12

Quick commands

Function	SMS command
Backend server parameter settings	SERVER,1,Domain,port,0# SERVER,0,IP,port,0#
Setting the APN	APN,<Internet Name># APN,<Internet Name>[,Username][,User Password]# Use custom APN parameters to turn off APN adaption. APN# Query the APN parameters currently in use.
Centre number setting	CENTER,A,Centre Number#
Enquiry Status	STATUS#
Query parameter settings	PARAM#
GPS data timing interval	TIMER,T1,T2# T1=5～60 s；ACC ON Status Upload Interval T2=5～60 s；ACC OFF Status Upload Interval

Safety Information

LYNKWORLD

This message contains information on how to operate LW2G-12F safely. By following these requirements and recommendations, you will avoid dangerous situations. You must read these instructions carefully and follow them strictly before operating the device!

• The device uses SELV limited power source. The nominal voltage is +12 V DC. The allowed voltage range is +9 ... +90 V DC.

• To avoid mechanical damage, it is advised to transport the device in an impact-proof package. Before usage, the device should be placed so that its LED indicators are visible. They show the status of device operation.

• When connecting the 12 connector wires to the vehicle, the appropriate jumpers of the vehicle power supply should be disconnected.

• Before unmounting the device from the vehicle, the 12 connector must be disconnected. The device is designed to be mounted in a zone of limited access, which is inaccessible to the operator. All related devices must meet the requirements of EN 60950-1 standard. The device LW2G-12F is not designed as a navigational device for boats.

Do not disassemble the device. If the device is damaged, the power supply cables are not isolated or the isolation is damaged, DO NOT touch the device before unplugging the power supply

All wireless data transferring devices produce interference that may affect other devices which are placed nearby.

The device must be connected only by qualified personnel.

The device must be firmly fastened in a predefined location.

The programming must be performed using a PC with autonomic power supply.

Installation and/or handling during a lightning storm is prohibited.

The device is susceptible to water and humidity.

Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

Battery should not be disposed of with general household waste. Bring damaged or worn-out batteries to your local recycling center or dispose them to battery recycle bin found in stores.

线束定义 Wiring Harness Definitions
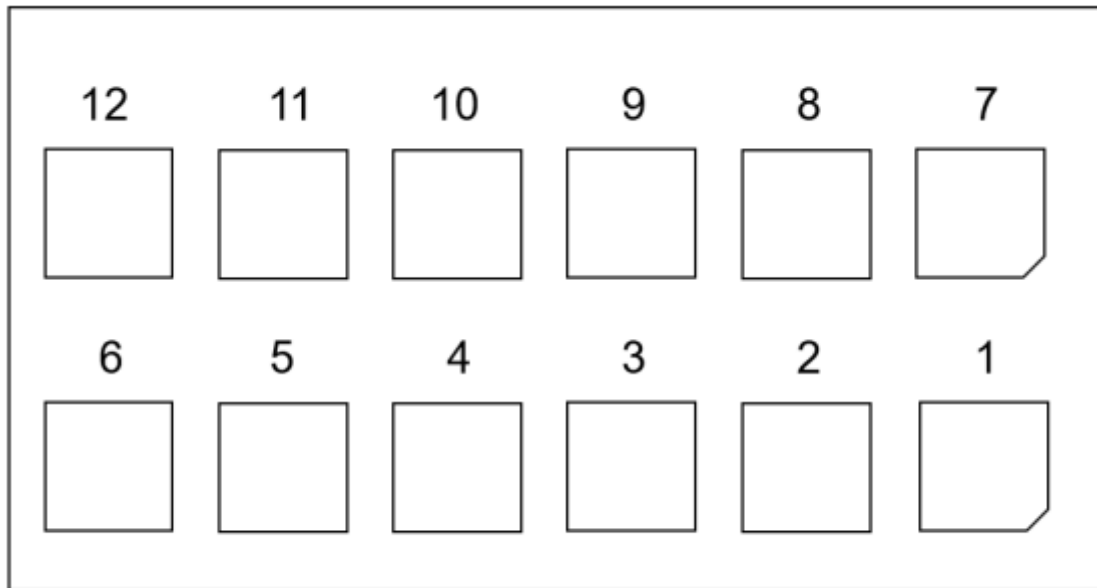
12PIN	11PIN	10PIN	9PIN	8PIN	7PIN
MIC-	MIC+	AIN1	DIN2(SOS)	485B	485A
6PIN	5PIN	4PIN	3PIN	2PIN	1PIN
SPK-	SPK+	DO1 (Relay)	DIN1 (ACC)	GND	VCC

产品简介 Product Introduction

名称	LW2G-12F
Product Name	LW2G-12F
尺寸	81(L)*43(W)*15.6(T)mm
Dimensions	81(L)*43(W)*15.6(T)mm
重量	49.5g
Weight	49.5g
定位方式	GPS、BDS
Positioning Methods	GPS, BDS
产品认证	CE、FCC
Product Certification	CE,FCC

产品功能 Product Functions

位置数据上报 Positioning Information Upload	按照设置的间隔时间上报经纬度等定位信息 Upload the positioning information such as longitude and latitude according to the interval setting
点火熄火状态 On/Off State	每次上传的数据包中均包含有 ACC 开关状态 Each uploaded data packet contains ignition status
断电提醒 External Power Cut-off Alarm	当终端检测到外接电源断开，上报断电提醒（开启后备电池） When the GPS tracker detects that the external power supply is disconnected, the device will report the power cut-off alarm (turn on the battery backup).
低压报警 Low Power Alarm/Battery Low Alarm	当终端检测到外接电压过低上报低压报警提醒 When the GPS tracker detects that the external power is too low, the low power alarm will be reported.
远程断油电 Remote Oil/Circuit Cut-off	远程下发指令断油电、通油电（需配置继电器） Remotely send commands to control on/off oil/circuit (relay needed)
碰撞报警 Crash Alarm	碰撞报警上传（内置传感器加速度值） Upload the crash alarm when a car crash occurs (built-in acceleration sensor)
驾驶行为监测 Driver Behavior Alarm	急加速、急减速、急转弯状态上传（内置加速度传感器） Harsh acceleration, harsh braking, harsh cornering status upload (built-in acceleration sensor)
拖车报警 Tow Alarm	车辆熄火状态且车头被抬起并产生位移时上报拖车报警 When the ignition is off, tow alarm will be uploaded if the vehicle front is raised and displacement occurs.
电子围栏 Geo Fence	通过平台下发电子区域，进出该区域产生围栏报警，支持 10 个硬件围栏 Send the geofence data through the platform, generate geofence alarm when the vehicle enters or exits the area, 10 hardware geofences supported
SOS 报警 SOS Alarm	通过按键触发 SOS 报警 Use the button to trig the SOS alarm
震动报警 Vibration Alarm	车辆熄火状态产生震动上传报警信息 When the ignition is off, if vibration happens then upload alarm information.
超速报警 Over-speed Alarm	速度超过设定值上传报警信息 Upload alarm information when the speed exceeds the set value
盲区补传 Message Buffer	信号盲区时存储定位数据，信号良好时补传，支持最大 1000 条数据存储 Positioning data will be stored in buffer when in network blind spots,

	and upload the data later when the tracker connects to network. Buffer Memory: 1000
拐点补传 Supplementary Upload at the Corner	检测车辆转弯状态，补传拐点数据，完善转弯轨迹 Upload extra data at the corner, refine turning trace
低功耗 Power-saving Mode	静止时切换到待机状态，智能省电 Switch to standby mode when the vehicle is stationary.
OTA	支持远程 OTA 升级 OTA supported
协议定制 Protocol Customized	可支持多种协议 Multiple communication protocols customization supported
RS485	支持 485 接口的外设及传感器接入 485 interface (sensors with 485 interface) supported
AIN	支持模拟量或模拟量的设备及外设接入 Analog or analog type equipments and peripheral devices supported
DIN	支持数字量信号(SOS 等)或数字量的设备及外设接入 Digital signals (such as SOS) or digital type equipments and peripheral devices supported
MIC	支持远程监听 Remote monitoring supported
SPK	支持语音播报 Voice broadcast supported

电源供应 Power Supply

外接电源 External Power Supply	9-90 VDC 9-90 VDC
内置备用电池 Built-in Backup Battery	140mAh 锂离子电池 140mAh Li-ion Battery

通讯制式 Technology

通讯制式	GSM
Technology	GSM
频段	850MHz/1900MHz
Quad Band	850MHz/1900MHz
GSM 天线	内置 GSM 天线
GSM Antenna	Built-in High Gain GSM Antenna
GPRS 规格	Class 12
GPRS Specification	Class 12
数据通路	短信、平台
Data Path	SMS, Platforms

卫星定位 Satellites Positioning

GNSS	GPS、BDS
GNSS	GPS, BDS
定位精度	<2m CEP
Positioning Accuracy	<2m CEP
GNSS 天线	25mm*25mm*4mm 陶瓷天线
GNSS Antenna	25mm*25mm*4mm ceramic antenna
捕获灵敏度	-148dBm
Capture Sensitivity	-148dBm
热启动	-156dBm
Warm Start	-156dBm
重新捕获灵敏度	-159dBm
Recapture Sensitivity	-159dBm
跟踪灵敏度	-167dBm
Tracking Sensitivity	-167dBm
定位时间（室外开阔条件下）	冷启动：平均 27S 热启动：平均 1S
Positioning Time (open sky)	Cold Start: 27s Warm Start: 1s

工作环境 Operating Environment

充电温度	-40℃ 到 45℃
Charging temperature	-40℃ to 45℃
防护等级	IP41
Protection Degree	IP41
工作湿度	5%到 95%
Operating Humidity	5% to 95%

硬件配置 Hardware Configuration

LED 指示灯	GSM、GNSS 指示灯
LED Indicators	GSM, GNSS Indicators
Micro USB	升级及调试
Micro USB	Firmware Upgrade and Tuning
SIM 卡槽	Micro-SIM/E-SIM
SIM Card Slot	Micro-SIM/E-SIM
重力传感器	三轴加速度传感器
Gravity Sensor	Three Axis Acceleration Sensor
VCC	1
GND	1
485A	1
485B	1
DIN	2 (DIN1:High Active DIN2:High/Low Active)
AIN	1(0-5V)
DO	1
MIC+	1
MIC-	1
SPK+	1
SPK-	1

指示灯定义 LED Indicators Definitions

橙色（GSM） Orange	快闪：GSM 初始化中 Fast Flashing: GSM is initializing	
	慢闪：GSM 接收信号正常 Slow Flashing: GSM signal is normal	
	常亮：GPRS 上线 Always on: GPRS working	
	不亮：未收到 GSM 信号/未插 SIM 卡 No Flashing: No GSM Signal / SIM Card	
蓝色（GPS） Blue	快闪：GPS 信号搜索中 Fast Flashing: Searching for GPS signal	
	常亮：GPS 已定位 Always on: Position Captured	
	不亮：GPS 休眠/GPS 未工作 No Flashing: GPS sleep / GPS not working	

RF Frequency:
GSM 850 (U.S.-Band: 824.2 - 848.8 MHz)
PCS 1900 (U.S.-Band: 1850.2 - 1909.8 MHz)

RF-Output Power:

2G: GSM 850：33.55dBm; PCS 1900 :28.44dBm

Federal Communications Commission (FCC) Statement
You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

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.

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

FCC RF Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.