1. Login package (uplink protocol number: AP00, response: BP00) —— All

Example：	
TRVAP00353456789012345# TRV:Identifier AP00:Command word 353456789012345:Device IMEI number, fixed 15 digits #:Terminator	
response：	Platform reply TRV**BP0020150608140830**#
Description：	Every time the device disconnects from the server, it needs to re-send the login package **20150608140830 Server UTC0 time**

2. Location data package, GPS+LBS+ status merge to achieve positioning (uplink protocol number: YP03, response: ZP03)

Message field	Field value	Types	Length (bytes)	Description
Start identifier	TRV	CHAR	3	
Command word	YP03	C_STRING	4	
Message body		C_STRING	75	
Message content	GPS,LBS,Status data			
End identifier	#	CHAR	1	

Example：
TRVYP03080524A2232.9806N11404.9355E000.1061830323.870600090800010200 0,460,0,9520,3671# Detailed :TRV Identifier **YP03: Command word** 080524: May 24, 2008 A: "A" means the data is valid, "V" is invalid, if it is V, then take LBS data 2232.9806N11404.9355E000.1: ， If the latitude and longitude are invalid, it can be all 0 by default, such as 0000.0000N00000.0000E

北纬 22 度 32.9806 分，东经 114 度 04.9355 分，速度为 000.1 km/h 22 degrees 32.9806 minutes north latitude, 114 degrees 04.9355 minutes east longitude, speed 000.1 km/h 061830: 06:18:30 GMT 323.87: Direction angle 323.87° 060009080001020000:060--GSM signal, 009--Number of satellites involved in positioning,080--battery power,0--ACC status,1--open,2--turn off,0---No ACC, 01--Fortified state：00--None or not set，01--defended，02--Undefended；02--The current working status of the equipment：00--None or not set，01--Continuous positioning state (TCP long connection mode)，02--Power saving working status (TCP short connection mode)； 0--The state of the car's oil switch：0--No item，1--Oil is on，2--Oil closed；0--The state of the car's electric switch：0--No item，1--Electricity is on，2--Power off；0--Disassembled state：0--This feature does not exist，1--Disassembled，2--No disassembly； 460,0,9520,3671 : LBS Base station data,MCC Country code,460--China,0:MNC,0--China mobile,9520:LAC,Decimal,3671,CID,Decimal If the status in the GPS data packet is V, or the latitude and longitude is "0000.0000N00000.0000E", then take LBS data	
response：	Platform response ZP03 TRV**ZP03#**
Description：	1. The location package server can save some traffic without responding, and the integration can confirm with the server whether to respond to the package; 2. The location packet is parsed by length, and the length of the data packet and the content of the data bits must be consistent with the protocol, otherwise it will cause the packet parsing abnormal; 3. This message applies to all terminals.

3.Device alarm, reply position (uplink protocol number: YP05, response: ZP05)

Message field	Field value	Types	Length (bytes)	Description
Start identifier	TRV	CHAR	3	
Command word	YP05	C_STRING	4	
Message body		C_STRING	87	
End identifier	#	CHAR	1	

Example：

TRVYP05080524A2232.9806N11404.9355E000.1061830323.87060090800010200 0,460,0,9520,3671,00,zh-cn,00#

详解:TRV 标识符

YP05: Command word

080524: May 24, 2008

A: "A" means the data is valid, "V" is invalid, if it is V, then take LBS data

2232.9806N11404.9355E000.1: , If the latitude and longitude are invalid, it can be all 0 by default, such as 0000.0000N00000.0000E

22 degrees 32.9806 minutes north latitude, 114 degrees 04.9355 minutes east longitude, speed 000.1 km/h

061830: 06:18:30 GMT

323.87: Direction angle 323.87°

060009080001020 00:060--GSM signal,009--Number of satellites involved in positioning,080--battery power,0--ACC status,1--open,2--turn off,0--no ACC, 01--Fortified state：00--None or not set， 01--defended ， 02--Undefended； 02--The current working status of the equipment：00--None or not set，01--Continuous positioning state (TCP long connection mode)，02--Power saving working status (TCP short connection mode)； 0--The state of the car's oil switch：0--No item，1--Oil is on，2--Oil closed；0--The state of the car's electric switch：0--No item，1--Electricity is on，2--Power off；0--Disassembled state：0--This feature does not exist，1--Disassembled，2--No disassembly

460,0,9520,3671 : LBS Base station data,MCC Country code,460 For China,0:MNC,0 For China Mobile,9520:LAC,Decimal,3671,CID,Decimal

00 为 Alarm status,00 为 No alarm(01:SOS alarm,02:Power failure alarm,03:Vibration

alarm,04:Falling off alarm,05:Into the fence alarm,06:Out of the fence alarm,07:Speeding alarm,08:Displacement alarm,09:Low battery alarm， 10:Power restoration) zh-cn: Device language 00:The first 0: Do you need to reply to address information, 0: No reply, 1 reply. The second 0: whether the address information contains a mobile phone hyperlink, 0 does not contain, 1 contains	
response：	The platform responds to ZP05.If the content of the reply address is not required, the content of the address in the reply packet is empty. TRV**ZP05**6df157335e0253575c71533a53576d7759279053003100300037003953f7002000200068007400740070003a002f002f007700770077002e00670070007730002e0063006f006d002f006d00610070002e006100730070007800 3f006c00610074003d00320033002e003100320033002e003100320033002e0067003d00310031003300 2e003100320033# **The content of the platform's response address is HEX's UNICODE code, not plain text. The above example content is:** **1079 Nanhai Avenue, Nanshan District, Shenzhen** http://www.gps.com/map.aspx?lat=23.123&lng=113.123 **The content language is automatically judged according to the language in the YP05 data package, and whether to reply to the hyperlink is also judged according to the YP05 status** **UNICODE code uses BIG-ENDIAN (BE) instead of BOM。**
Description：	1. The package server must respond; 2. The location packet is parsed by length, and the length of the data packet and the content of the data bits must be consistent with the protocol, otherwise it will cause the packet parsing abnormal; 3. This message applies to all terminals.

3. Set upload time interval (downlink protocol number: WP02, response: XP02)

Message field	Field value	Types	Length (bytes)	Description

Start identifier	TRV	CHAR	3	
Command word	WP02	C_STRING	4	
serial number		C_STRING	6	
time interval		C_STRING	4	Unit: second (decimal)
End identifier	#	CHAR	1	

Example：	
TRVWP020000080020# WP02**: Command word** 000008: The server issues a serial number and the terminal returns 0020: 20 second interval, the maximum limit is 9999。	
response：	Terminal reply TRV**XP02**0000080# 000008: The serial number issued by the server, the device returns 0: Command execution status, 0 success, 1 failure
Description：	This message applies to all terminals.

4. Device heartbeat packet (uplink protocol number: YP07, response: ZP07)

Message field	Field value	Types	Length (bytes)	Description
Start identifier	TRV	CHAR	3	
Command word	YP07	C_STRING	4	
Delimiter		C_STRING	1	
Message body		C_STRING	28	The message body length and identification bits are fixed, please strictly follow the protocol order
End identifier	#	CHAR	1	

Example：
TRVYP07, 060009080000200301010100201111# YP07**:Command word** **When the device is at rest, the instruction can be used to maintain connection with the platform and solve static drift** 060009080000200301010100201111:060--GSM signal,009--Number of satellites involved in

positioning,080--battery power,0,--ACC status,1:--open,2--turn off,0--No ACC； 0--Disassembled state： 0--This feature does not exist， 1--Disassembled， 2--No disassembly； 02--The current working status of the equipment：00--None or not set，01--Continuous positioning state (TCP long connection mode)， 02--Power saving working status (TCP short connection mode) 0030 --Time interval of regular reporting unit: 30 seconds 1--Manual defense (vibration alarm) switch (manual defense) 1 is on, 2 is off 010 --Vibration sensor sensitivity 1-100 1--Automatic defense switch 1 is on, 2 is off 0020 --Automatic defense timing time Unit second: 20 seconds 1 --Oil state, 1 is open (recovering oil state, oil is on state), 2 is off (oil state is off, oil is off state) 1 --Power status, 1 is on (power is restored, power is on), 2 is off (power is off, power is off) 1--External power supply status, 1. Means external power supply is connected, 2. Means no external power supply is connected (external power supply is disconnected and considered to be removed), 0 means no external power supply 1:-- Equipment motion status 1 means the equipment is in motion 2 means the equipment is in a static state 0 means the state is invalid	
response：	TRV**ZP07**#
Description：	The upload frequency of heartbeat packets should not exceed 5 minutes, and 3 minutes is recommended. Too long will easily cause the operator to disconnect from the middle

5. Remotely fortify and disarm (downlink protocol number: BP02, response: AP02)

Message field	Field value	Types	Length (bytes)	Description
Start identifier	TRV	CHAR	3	
Command word	BP02	C_STRING	4	
serial number		C_STRING	6	
Armed and disarmed state		C_STRING	1	0 means defense, 1 means disarm
End identifier	#	CHAR	1	

Example： TRVBP020000010# BP02: **Command word** 000001: The server issues a serial number and the terminal returns 0: 0 means defense, 1 means disarm	
response：	Terminal reply TRV**AP02**0000010# 000001: The serial number issued by the server, the device returns 0: Command execution status, 0 success, 1 failure
Description：	The terminal device must reply

6. Remotely cut off oil and power (downlink protocol number: BP03, response: AP03)

Message field	Field value	Types	Length (bytes)	Description
Start identifier	TRV	CHAR	3	
Command word	BP03	C_STRING	4	
serial number		C_STRING	6	
Oil and power off state		C_STRING	1	0 means oil cut, 1 means power cut
End identifier	#	CHAR	1	

Example： TRVBP030000020# BP03: **Command word** 000002: The server issues a serial number and the terminal returns 0: 0 means oil cut, 1 means power cut	
response：	Terminal reply TRV**AP03**0000020# 000002: The serial number issued by the server, the device returns 0: Command execution status, 0 success, 1 failure
Description：	The terminal must reply with a response status

7. Remote recovery of oil circuit and circuit (downlink protocol number: BP04, response: AP04)

Message field	Field value	Types	Length	Description

			(bytes)	
Start identifier	TRV	CHAR	3	
Command word	BP04	C_STRING	4	
serial number		C_STRING	6	
Restore the state of the oil circuit		C_STRING	1	0 is recovery oil, 1 is recovery power
End identifier	#	CHAR	1	

Example：	
TRVBP040000030# BP04**: Command word** 000003: The server issues a serial number and the terminal returns 0: 0 is recovery oil, 1 is recovery power	
response：	Terminal reply TRV**AP04**0000030# 000003: The serial number issued by the server, the device returns 0: Command execution status, 0 success, 1 failure
Description：	Terminal must reply

8. AGPS (uplink protocol number: AP14, response: BP14)

Message field	Field value	Types	Length (bytes)	Description
Start identifier	TRV	CHAR	3	
Command word	BP14	C_STRING	4	
Delimiter	,	C_STRING	1	
Base station information			N	Decimal representation
End identifier	#	CHAR	1	

Example：	
TRVAP14,460,0,9520,3671# AP14**: Command word** 460,0,9520,3671 : LBS Base station data,MCC Country code,460 For China,0:MNC,0 For China Mobile,9520:LAC, Decimal,3671,CID, Decimal	
response：	Platform reply TRV**BP14**,23.113,113.123# 23.113,113.123: latitude longtitude
Description：	1. The platform must respond to the reply 2. It is recommended to keep only 5 digits after the decimal point of the

	latitude and longitude of the reply. If it is too long, please consult the equipment party if it is affected; 3. This message applies to all terminals.

9. Set overspeed (delivery: BP74, reply: AP74)

Message field	Field value	Types	Length (bytes)	Description
Start identifier	TRV	CHAR	3	
Command word	BP74	C_STRING	4	
serial number	000001	C_STRING	6	
duration		C_STRING	N	Unit: second
Overspeed		C_STRING	N	Unit: KM/H
End identifier	#	CHAR	1	

Example：	
TRVBP74000001,600,120# TRV: identifier BP73: Command word 000001: The server sends a serial number and the terminal returns 600: Indicates the duration, limit input 0-999 120: means overspeed, limit input 0-999 #: terminator	
response：	Terminal reply TRVAP740000010# 000001: The serial number issued by the server, the device returns 0: command execution status, 0 succeeds, 1 fails
Description：	The terminal must reply with a response.

10.Set the interval of heartbeat packets (delivery: DP03, reply: CP03)

Message field	Field value	Types	Length (bytes)	Description
Start identifier	TRV	CHAR	3	
Command word	DP03	C_STRING	4	
serial number	000001	C_STRING	6	
Message body		C_STRING	N	
End identifier	#	CHAR	1	

示例：

TRVDP03000001,180# TRV: identifier DP03: Command word 000001: The server sends a serial number and the terminal returns 180: Indicates the time interval for uploading heartbeat packets. Unit: second, limit input 120-300 #: terminator	
response：	Terminal reply TRV**CP03**0000010# 000001: The serial number issued by the server, the device returns 0: Command execution status, 0 success, 1 failure
Description：	The terminal must reply with a response

11. Device restart (downstream: BP61)

Example： TRVBP61#	
Parameter Description: BP61 script # End of instruction	
response：	TRVAP61# The device receives the instruction and uploads the AP61 instruction code in response to the issue week, and then starts the restart function
Description：	The device does not have to reply

12. Restore the factory settings of the device (downstream: BP62)

Example：	
TRVBP62# Parameter Description: BP62 script # End of instruction	
response：	When the device receives the instruction, it will start the factory reset function, without the need for uplink response
Description：	This message applies to all terminals.

13. Upload the IMSI number and ICCID number of the device to the platform (device upstream: YP02, platform response: ZP02)

Message field	Field value	Types	Length (bytes)	Description

Start identifier	TRV	CHAR	3	
Command word	YP02	C_STRING	4	
Delimiter	,	C_STRING	1	
Message body (IMSI number)		C_STRING	N	
Delimiter	,	C_STRING	1	
Message body (ICCID number)		C_STRING	N	
End identifier	#	CHAR	1	
Example：				
TRVYP02,460023136470163,898602B1191550255484# TRV: Identifier YP02: Command word ,: separator 460023136470163: The IMSI number of the device (460 is China's MCC, 02 is China Mobile MNC, 3136470163 is the mobile subscriber identification number MSIN) 898602B1191550255484: ICCID number of the device #: terminator				
response：	Platform response TRV**ZP02**#			
Description：	1. The platform must respond. 2. The time point of using this protocol: After the login packet AP00 is sent and the response from the platform BP00 is obtained, YP02 is sent immediately.			

14.Synchronization status protocol (uplink: AP57, downlink: BP57)

Message field	Field value	Types	Length (bytes)	Description
Start identifier	TRV	CHAR	3	
Command word	AP57	C_STRING	4	
Delimiter		C_STRING	1	
Message body		C_STRING	N	
End identifier	#	CHAR	1	

Example：

TRVAP57,868016804152425,1,00,60,13410937109|13310937109|13501837108#

AP57: **Command word**

868016804152425： Device IMEI number

1 ： Armed and disarmed state 1 means arming, 0 means disarming

0 ： The oil state of the car, 0 means no such state, 1 means the oil is on, 2 means the oil is off

0 ： The electric state of the car, 0 means no such state, 1 means power is on, 2 means power is off

60 ： Indicates that the upload frequency interval is in seconds, and 60 means that the packet

interval (frequency) is 60 seconds 13410937109|13310937109|13501837108： The length and number of SOS numbers are not limited, and the numbers are separated by "|"	
response：	TRVBP57,OK#
Description：	1. The server must respond 2. If the device does not receive a reply from the platform within 2 minutes of reporting status data, the device will consider continuing to report status information according to the situation 3. When the item that contains this agreement in the device changes, it will report this status, and the platform can keep in sync with the device after receiving it.

15.Change IP or domain name (uplink AP64, downlink BP64)

Example：	
TRVBP64, 120440, www.321gps.com,8011# TRV: identifier BP64: Command word 120440 serial number, 127.0.0.1: When it means IP, the secondary field is the IP address, if it is a domain name, the field is the domain name 8011: Port for uploading data #: terminator	
response：	TRVAP64,120440,www.321gps.com,8011# Parameter Description: AP64 script 120440 When the device responds, it needs to upload the corresponding serial number as it is for the platform's corresponding instructions www.gpscar.cn: the domain name bound to the device, ASCII code 8011 port # End of instruction
Description：	This message applies to all terminals.

16.Change the displacement alarm threshold (uplink: AP98; downlink: BP98)

Example：
TRVBP98100001000300# TRV: Identifier

BP98: Command word 100001 serial number 000300, Speed threshold is 300 #: Terminator	
response：	Platform reply TRV**AP981000010**# 100001： The serial number issued by the server, the device returns 0: Command execution status, 0 success, 1 failure
Description：	

17.Set vibration alarm switch (uplink: AP97; downlink: BP97)

Example：	
TRVBP971000011# TRV:Identifier BP98: Command word 100001: serial number 1:1, Turn on vibration alarm; 0, turn off vibration alarm #: Terminator	
response：	Platform reply TRVAP971000010# 100001: The serial number issued by the server, the device returns 0: command execution status, 0 succeeds, 1 fails
Description：	