MEITRACK T355G/T355V2 GPRS Protocol

Applicable Model: T355G/T355V2

Change History

File Name	MEITRACK T355G/T355V2 GPRS Protocol	Created By	William Sun
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Contents

1 Command Format

1.1 GPRS Command Format

- GPRS command sent from the server to the tracker:

  @@<Data identifier><Data length>,<IMEI>,<Command type>,<Command><*Checksum>\r\n

- GPRS command sent from the tracker to the server:

  $$<Data identifier><Data length>,<IMEI>,<Command type>,<Command><*Checksum>\r\n

1.2 Tracker Command Format

$$<Data identifier><Data length>,<IMEI>,<Command type>,<Event code>,<(-)Latitude>,<(-)Longitude>,<Date and time>,<Positioning status>,<Number of satellites>,<GSM signal strength>,<Speed>,<Direction>,<Horizontal dilution of precision (HDOP)>,<Altitude>,<Mileage>,<Run time>,<Base station info>,<I/O port status>,<Analog input value>,<Assisted event info>,<Customized data>,<Protocol version><*Checksum>\r\n

Note:

- A comma (,) is used to separate data characters. The character type is the American Standard Code for Information Interchange (ASCII). (Hexadecimal is represented as 0x2C.)
- Symbols "<" and ">" will not be present in actual data, only for documentation purpose only.
- All multi-byte data complies with the following rule: High bytes are prior to low bytes.
- The size of a GPRS data packet is about 160 bytes.

Descriptions about GPRS packets from the tracker are as follows:

Parameter	Description	Example
@@	Indicates the GPRS data packet header sent from the server to the tracker. The header type is ASCII. (Hexadecimal is represented as 0x40.)	@@
$$	Indicates the GPRS data packet header sent from the tracker to the server. The header type is ASCII. (Hexadecimal is represented as 0x24.)	$$
Data identifier	Contains 1 byte. The type is the ASCII, and its value ranges from 0x41 to 0x7A.	Q
Data length	Indicates the length of characters from the first comma (,) to \r\n. Decimal. Example: $$<Data identifier><Data length>,<IMEI>,<Command type>,<Command><* Checksum>\r\n	25
IMEI	Indicates the tracker IMEI number. The number type is ASCII. It has 15 digits generally.	353358017784062
Command type	Hexadecimal For details, see chapter 2 and chapter 3.	AAA
Event code	Decimal For details, see section 1.3 "Event Code."	1
Latitude (-)yy.dddddd	Unit: degree Decimal When a minus (-) exists, the tracker is in the southern	22.756325 (indicates 22.756325°N) -23.256438 (indicates

	hemisphere. When no minus (-) exists, the tracker is in the northern hemisphere. **yy** indicates the degree. **dddddd** indicates the decimal part.	23.256438°S)
Longitude (-)xxx.dddddd	Unit: degree Decimal When a minus (-) exists, the tracker is in the western hemisphere. When no minus (-) exists, the tracker is in the eastern hemisphere. **xxx** indicates the degree. **dddddd** indicates the decimal part.	114.752146 (indicates 114.752146°E) -114.821453 (indicates 114.821453°W)
Date and time yymmddHHMMSS	**yy** indicates year. **mm** indicates month. **dd** indicates day. **HH** indicates hour. **MM** indicates minute. **SS** indicates second. Decimal	091221102631 Indicates 21 December 2009, 10:26:31 am.
Positioning status	Indicates the GPS signal status. **A** = Valid **V** = Invalid	A The GPS is valid.
Number of satellites	Indicates the number of received GPS satellites. Decimal	5 Five GPS satellites are received.
GSM signal strength	Value: 0–31 Decimal	12 The signal strength is 12.
Speed	Unit: km/h Decimal	58 The speed is 58 km/h.
Direction	Indicates the driving direction. The unit is degree. When the value is **0**, the direction is north. The value ranges from 0 to 359. Decimal	45: indicates that the location is at northeast. 90: indicates that the location is at east.
HDOP	The value ranges from 0.5 to 99.9. The smaller the value is, the more the accuracy is. Decimal When the accuracy value is **0**, the signal is invalid. 0.5–1: Perfect 2–3: Wonderful 4–6: Good 7–8: Medium 9–20: Below average 21–99.9: Poor	5 The HDOP is 5.
Altitude	Unit: meter	118

		Decimal	
Mileage		Unit: meter Decimal Indicates the total mileage. The maximum value is 4294967295. If the value exceeds the maximum value, it will be automatically cleared.	564870
Run time		Unit: second Decimal Indicates the total time. The maximum value is 4294967295. If the value exceeds the maximum value, it will be automatically cleared.	2546321
Base station info		The base station information includes: MCC|MNC|LAC|CI The MCC and MNC are decimal, while the LAC and CI are hexadecimal. Note: Base station information in an SMS is empty.	460|0|E166|A08B
I/O port status		Hexadecimal Status values of eight input ports and eight output ports: Bit0 to Bit7 corresponds to status of output ports 1 to 8. Bit8 to Bit15 corresponds to status of input ports 1 to 8.	0421 (hexadecimal) = 0000 0100 0010 0001
Analog input value		Separated by "|". Hexadecimal AD1|AD2|AD3|Battery analog|External power analog Note: Analog input values in an SMS report are empty. **AD1, AD2, and AD3:** reserved **Voltage formula of battery analog (AD4):** T355G/T355V2: AD4/100 **Voltage formula of external power supply (AD5):** T355G/T355V2: AD5/100	123|456|235|1456|222 (Hexadecimal)
Assisted event info	Geo-fence number	32-bit unsigned Only available by GPRS event code 20 or 21.	02 00 00 00 (indicates geo-fence 2)
	Vehicle theft trigger source	32-bit unsigned Trigger code of a vehicle theft event Flag generated by event 58	01 00 00 00
Customized data		Reserved A separator still exists.	
Protocol version		Decimal 1–50: Used for all common Meitrack protocols. 50–99: Used for OBD. When the protocol is compatible with the old tracker, the value is empty or is 0 by default.	1
*		Separates commands from checksums. 1 byte and ASCII (Hexadecimal is represented as 0x2A)	*

Checksum	2 bytes. The parameter indicates the sum of all data (excluding the checksum and ending mark). It is a hexadecimal character. Example: _$$<Data identifier><Data length>,<IMEI>,<Command type>,<Command><*Checksum>_\r\n	BE
\r\n	2 bytes. The parameter is an ending character. The type is ASCII. (Hexadecimal value: 0x0d 0x0a)	\r\n

1.3 Event Code

Event Code	Event	Default SMS Header (At Most 16 Bytes)
17	**Low Battery**	Low Battery
19	**Speeding**	Speeding
20	**Enter Geo-fence**	Enter Fence N (N means the number of the fence)
21	**Exit Geo-fence**	Exit Fence N (N means the number of the fence)
24	**GPS Signal Lost**	GPS Signal Lost
25	**GPS Signal Recovery**	GPS Recovery
26	**Enter Sleep**	Enter Sleep
27	**Exit Sleep**	Exit Sleep
28	**GPS Antenna Cut**	GPS Antenna Cut
29	**Device Reboot**	Power On
31	**Heartbeat**	/
32	**Cornering**	Cornering
33	**Track By Distance**	Distance
34	**Reply Current (Passive)**	Now
35	**Track By Time Interval**	Interval
40	**Power Off**	Power Off
56	**Armed**	Armed
57	**Disarmed**	Disarmed
58	**Vehicle Theft**	Vehicle Theft
80	**Install**	Install
81	**Drop Off**	Drop Off

2 Command List

Command	Command Description
A10	Real-Time Location Query
A11	Setting a Heartbeat Packet Reporting Interval
A12	Tracking by Time Interval
A13	Setting the Cornering Report Function
A14	Tracking by Distance
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A21	Setting GPRS Parameters
A23	Setting the Standby GPRS Server
A70	Reading All Authorized Phone Numbers
A71	Setting Authorized Phone Numbers
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B05	Setting a Geo-Fence
B06	Deleting a Geo-Fence
B07	Setting the Speeding Alarm Function
B09	Setting the Sensitivity Level of the 3D Vibration Sensor
B21	Setting the Anti-Theft Function
B34	Setting a Log Interval
B35	Setting the SMS Time Zone
B91	Setting SMS Event Characters
B99	Setting Event Authorization
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E91	Reading Device's Firmware Version and SN
F01	Restarting the GSM Module
F02	Restarting the GPS Module
F08	Setting the Mileage and Run Time
F09	Deleting SMS/GPRS Cache Data
F11	Restoring Initial Settings

3 Command Details

3.1 Real-Time Location Query – A10

GPRS Sending	A10
GPRS Reply	AAA,34,(-)*Latitude*,(-)*Longitude*,*Date and time*,*Positioning status*,*Number of satellites*,*GSM signal strength*,*Speed*,*Direction*,*HDOP*,*Altitude*,*Mileage*,*Run time*,*Base station info*,*I/O port status*,*Analog input value*
Description	**34**: indicates the GPRS command event code.

Example	
GPRS Sending	@@Q25,353358017784062,A10*6A\r\n
GPRS Reply	$$Q128,353358017784062,AAA,34,22.543176,114.078448,100313093738,A,5,22,2,205,5,-14,0,60,0|0|10133|4110,0000,149|153|173|2707|914,*91\r\n

3.2 Setting a Heartbeat Packet Reporting Interval – A11

GPRS Sending	A11,*Interval*
GPRS Reply	A11,OK
Description	The heartbeat packet function is used to keep the Transmission Control Protocol (TCP) connection open when the interval of scheduled GPRS reporting is long. Interval = 0: function disabled (default). Interval = [1…65535]: function enabled. Unit: minute. The heartbeat function is available only in conjunction with deep sleep mode. When the device enters deep sleep mode, heartbeat reports will be sent at the specified interval. A heartbeat report is to confirm the device is online, but positioning data is invalid.
Example	
GPRS Sending	@@S28,353358017784062,A11,10*FD\r\n
GPRS Reply	$$S28,353358017784062,A11,OK*FE\r\n *After the above command is run successfully, the tracker will send the following GPRS heartbeat packet to the platform every 10 minutes in sleep mode:* *$$a131,353358017784062,AAA,31,22.913458,114.083183,080229123628,V,9,23,21,83,1,18,1350,127,0|0|10133|4110,0000,169|181|184|2714|919,*60*

3.3 Tracking by Time Interval – A12

GPRS Sending	A12,*Interval*
GPRS Reply	A12,OK
Description	Unit: x10 seconds Interval = 0: function disabled. The maximum time interval is 65535 x 10 seconds. 6 x 10 seconds are recommended.
Example	
GPRS Sending	@@V27,353358017784062,A12,6*D5\r\n
GPRS Reply	$$V28,353358017784062,A12,OK*02\r\n *After the above command is run successfully, the tracker will send the following GPRS data packet to the platform every 1 minute:* *$$W129,353358017784062,AAA,35,22.540113,114.076141,100313094354,A,5,22,1,174,4,129,0,435,0|0|10133|4110,0000,166|224|193|2704|916,*BE\r\n*

3.4 Setting the Cornering Report Function – A13

GPRS Sending	A13,*Angle*
GPRS Reply	A13,OK
Description	When the driving angle exceeds the preset value, the tracker will send a GPRS data packet with location information to the server, which ensures a smoother route on the platform. Angle = 0: function disabled (default). Angle = [1…359]: function enabled. Recommended value: **30**.
Example	
GPRS Sending	@@X29,353358017784062,A13,120*37\r\n
GPRS Reply	$$X28,353358017784062,A13,OK*05\r\n *After the above command is run successfully, if the cornering angle is greater than 120 degree, the tracker will send the following GPRS data pakcet to the server:* *$$Y129,353358017784062,AAA,32,22.540968,114.077455,100313094534,A,4,22,1,166, 3,175,0,534,0|0|10133|4110,0000,141|138|159|2691|904,*D9\r\n*

3.5 Tracking by Distance – A14

GPRS Sending	A14,*Distance*
GPRS Reply	A14,OK
Description	Distance = 0: function disabled (default). Distance = [1…65535]: function enabled. Unit: meter. Note: When both the GPRS time interval and distance tracking functions are enabled, the "first reach first report" rule will be applied. For example, set the time interval to 6 x 10 seconds and distance to 200 meters. If the road is clear, a distance data packet will be reported first; if there is heavy traffic on the road, a time interval data packet will be reported first. Then both the time interval and distance counters will be reset to 0. **300** is recommended.
Example	
GPRS Sending	@@D30,353358017784062,A14,1000*4A\r\n
GPRS Reply	$$D28,353358017784062,A14,OK*F2\r\n *After the above command is run successfully, if the driving distance reaches 1000m, the tracker will send a data packet to the server.* *$$D131,353358017784062,AAA,33,22.547271,114.047405,080310080929,A,8,21,13,89 ,1,12,8525,561,0|0|10133|4110,0000,163|185|186|2712|939,*31\r\n*

3.6 Waking the Device Up by Vibration – A19

GPRS Sending	A19,X
GPRS Reply	A19,OK
Description	This function is used to determine whether the device will be woken up by vibration in deep mode.

	X = 0: The device will not be woken up by vibration.
	X = 1: The device will be woken up by vibration (default).
Example	
GPRS Sending	@@H27,353358017784062,A19,1*C9\r\n
GPRS Reply	$$H28,353358017784062,A19,OK*F8\r\n

3.7 Setting GPRS Parameters – A21

GPRS Sending	A21,*Connection mode,IP address,Port,APN,APN user name,APN password*
GPRS Reply	A21,OK
Description	Connection mode = 0: function disabled.
	Connection mode = 1: function enabled; use TCP/IP reporting mode.
	Connection mode = 2: function enabled; use UDP reporting mode.
	IP address: IP address or domain name. A maximum of 32 bytes are supported.
	Port: a maximum of 5 digits.
	APN/APN user name/APN password: a maximum of 32 bytes respectively.
	If no user name and password are required, leave them blank.
	Note:
	1. If you want to change a parameter (named **A**), the parameter before **A** cannot be empty.
	2. If you do not want to change the parameters after **A**, no comma is required when you edit the command.
	3. If you want to clear the parameters after **A**, commas are required when you edit the command.
	For example, if you want to change the IP address and port only, send **A21,1,192.168.1.1,8800**.
Example	
GPRS Sending	@@H48,353358017784062,A21,1,67.203.13.26,8800,,,*C9
GPRS Reply	$$H28,353358017784062,A21,OK*F4\r\n

3.8 Setting the Standby GPRS Server – A23

GPRS Sending	A23,*IP address,Port*
GPRS Reply	A23,OK
Description	IP address: a maximum of 32 bytes
	Port: a maximum of 5 digits
	When the tracker fails to send data to the active server set by command A21, data is automatically sent to the standby server to prevent data loss.
Example	
GPRS Sending	@@S43,353358017784062,A23,67.203.13.26,8800*F0
GPRS Reply	$$S28,353358017784062,A23,OK*01\r\n

3.9 Reading All Authorized Phone Numbers – A70

GPRS Sending	A70
GPRS Reply	A70,*SOS phone number 1,SOS phone number 2,SOS phone number 3,Listen-in phone number 1,Listen-in phone number 2*
Description	Read all authorized phone numbers.
Example	
GPRS Sending	@@T25, 353358017784062,A70*93\r\n
GPRS Reply	$$T85,353358017784062,A70,13811111111,13822222222,13833333333,13844444444, 13855555555*21\r\n

3.10 Setting Authorized Phone Numbers – A71

GPRS Sending	A71,*Phone number 1,Phone number 2,Phone number 3*
GPRS Reply	A71,OK
Description	Phone number: A phone number has a maximum of 16 bytes. If no phone numbers are set, leave them blank. Phone numbers are empty by default. Phone number 1: SOS phone number. When you call the tracker by using the phone number, you will receive SMS notification about the location, geo-fence alarm and low power alarm. When the SOS button is pressed, the tracker will dial phone numbers 1, 2, and 3 in sequence. The tracker stops dialing when a phone number responds.
Example	
GPRS Sending	@@U61,353358017784062,A71,13811111111,13822222222,13833333333*7D\r\n
GPRS Reply	$$U28,353358017784062,A71,OK*06\r\n

3.11 Setting the Smart Sleep Mode – A73

GPRS Sending	A73,*Sleep level*
GPRS Reply	A73,OK
Description	Set the automatic smart sleep mode when the tracker is idle. Sleep level = 0: function disabled. Sleep level = 1: normal sleep. The 2G/3G module always works, and the GPS module occasionally works at 5-minute intervals. You can set device parameters by Meitrack Manager to enable or disable the normal sleep mode. The settings about enabling the mode will take effect after five minutes, while the settings about disabling the mode will take effect immediately. Note: This mode is not recommended for short interval tracking; this will affect the route precision. Sleep level = 2: deep sleep (default value). If no event (drop/incoming call/SMS/vibration) is triggered after five minutes, the tracker will enter deep sleep mode, and the GPS and 2G/3G modules will stop working. In this way, a triggering event (drop/vibration) can wake the device up, and then the device will enter working mode.

	GPS and 2G/3G modules can be enabled intelligently based on vehicle status, which saves power. In deep sleep mode, the tracker can be woken up only when the tracker drops or vibrates. If a vibration event is triggered, sleep level 0 will be enabled. In the device running mode, sleep level 0 or 2 will be enabled alternatively. In sleep mode, the scheduled tracking and distance tracking functions will be disabled. If a drop event is triggered, the sleep mode will be disabled. The device does not enter the deep sleep mode until it is installed into the vehicle again. Note: When the device is disconnected from the vehicle for more than five seconds, a drop alarm will be generated and the device will enter the normal working mode instead of the sleep mode. The device will send data at the specific time interval until its battery power is empty.
Example	
GPRS Sending	@@W27,353358017784062,A73,2*D9\r\n
GPRS Reply	$$W28,353358017784062,A73,OK*0A\r\n

3.12 Automatic Event Report – AAA

GPRS Event Report	AAA,*Command type,(-)Latitude,(-)Longitude,Date and time,Positioning status,Number of satellites,GSM signal strength,Speed,Direction,HDOP,Altitude,Mileage,Run time,Base station info,I/O port status,Analog input value*
Description	When an event occurs, the tracker automatically reports the event to the server.
Example	
GPRS Reply	*When you press the SOS button, the tracker will send the following information to the server:* *$$G127,353358017784062,AAA,1,22.538169,114.075958,100313095653,A,3,21,4,46,5, 581,0,148,0|0|10133|4172,0000,166|204|205|2709|878,*77\r\n*

3.13 Deleting a GPRS Event in the Buffer – AFF

GPRS Sending	AFF,*Number of deleted GPRS events*
GPRS Reply	Use the AFF command to clear the existing data when the GPRS connection mode is UDP. AFF,*Number of remaining cache,Command type, (-)Latitude,(-)Longitude,Data and time,Positioning status,Number of satellites,GSM signal strength,Speed,Direction,HDOP,Altitude,Mileage,Run time,Base station info,I/O port status,Analog input value*
Description	Number of deleted GPRS events: hexadecimal. In general, the number is 1. Number of remaining cache: indicates the number of events in the buffer; hexadecimal.
Example	
GPRS Sending	@@h27,353358017784062,AFF,1*0B\r\n
GPRS Reply	$$h28,353358017784062,AFF,OK*3D\r\n

3.14 Setting a Geo-Fence – B05

GPRS Sending	B05,*Geo-fence number,Latitude,Longitude,Radius,IN Geo-fence alarm,OUT Geo-fence alarm*
GPRS Reply	B05,OK
Description	Geo-fence number: 1–8. A maximum of eight geo-fences can be set. Latitude: latitude of the geo-fence center; decimal; accurate to 6 digits after the decimal point. If there are only 4 digits after the decimal point, add two digits 0. Otherwise, the command cannot be used successfully. Longitude: longitude of the geo-fence center; decimal; accurate to 6 digits after the decimal point. If there are only 4 digits after the decimal point, add two digits 0. Otherwise, the command cannot be used successfully. Radius: The value ranges from 1 to 4294967295. The unit is meter. IN Geo-fence alarm = 0: function disabled. IN Geo-fence alarm = 1: function enabled. OUT Geo-fence alarm = 0: function disabled. OUT Geo-fence alarm = 1: function enabled.
Example	
GPRS Sending	@@H57,353358017784062,B05,1,22.913191,114.079882,1000,0,1*96\r\n
GPRS Reply	$$H28,353358017784062,B05,OK*F7\r\n *When the tracker exits the geo-fence (latitude: 22.913191; longitude: 114.079882; radiu: 1000m), it will send the following GPRS data packet to the server:* $$J132,353358017784062,AAA,21,22.918046,114.089726,080229123812,A,10,22,12,32, 1,21,6667,847,0|0|10133|4110,0000,124|181|183|2714|922,*5A\r\n

3.15 Deleting a Geo-Fence – B06

GPRS Sending	B06,*Geo-fence number*
GPRS Reply	B06,OK
Description	Geo-fence number: 1–8. Only one geo-fence can be deleted each time by SMS or GPRS command.
Example	
GPRS Sending	@@J27,353358017784062,B06,1*C8\r\n
GPRS Reply	$$J28,353358017784062,B06,OK*FA\r\n *After the above command is run successfully, the first geo-fence will be deleted.*

3.16 Setting the Speeding Alarm Function – B07

GPRS Sending	B07,*Driving speed*
GPRS Reply	B07,OK
Description	Driving speed = 0: function disabled (default). Driving speed = [1…255]: function enabled. Unit: km/h. When the driving speed reaches the preset value, a speeding alarm will be generated.

Example

GPRS Sending	@@P28,353358017784062,B07,60*05\r\n
GPRS Reply	$$P28,353358017784062,B07,OK*01\r\n
	When the tracker driving speed reaches 60 km/h, it will send the following information to the server:
	$$k134,353358017784062,AAA,19,22.916675,114.088813,080229123718,A,10,22,61,31,1,21,
	*6635,395,460|0|10133|4110,0000,164|185|181|2712|915,*F7\r\n*

3.17 Setting the Sensitivity Level of the 3D Vibration Sensor – B09

GPRS Sending	B09,*Sensitivity level*
GPRS Reply	B09,OK
Description	Sensitivity level = [0…100]: The smaller the value is, the more sensitive the 3D vibration sensor is. The default value is 10. Sensitivity level = [101…110]: indicates the vibration times within one second. For example, **101** indicates that the sensor vibrates 1 times within one second and **110** indicates that the sensor vibrates 10 times within one second.

Example

GPRS Sending	@@I27,353358017784062,B09,3*CC\r\n
GPRS Reply	$$I28,353358017784062,B09,OK*FC\r\n

3.18 Setting the Anti-Theft Function – B21

GPRS Sending	B21,*Status*
GPRS Reply	B21,OK
Description	Status = 1: function enabled (default). Status = 0: function disabled. Note: A vehicle theft alarm will be generated only when the device is in arming state.

Example

GPRS Sending	@@C27,353358017784062,B21,1*BE\r\n
GPRS Reply	$$C28,353358017784062,B21,OK*F0\r\n

3.19 Setting a Log Interval – B34

GPRS Sending	B34,*Log interval*
GPRS Reply	B34,OK
Description	Set the interval for recording data to device's memory when the GPS signal is valid. Recorded logs can only be read by GPSLog or Meitrack Manager software. Log interval = 0: function disabled (default). Log interval = [1…65535]: function enabled. Unit: second.

Example

GPRS Sending	@@N28,353358017784062,B34,60*03\r\n
GPRS Reply	$$N28,353358017784062,B34,OK*FF\r\n

3.20 Setting the SMS Time Zone – B35

GPRS Sending	B35,*SMS minute*
GPRS Reply	B35,OK
Description	The default time zone of the tracker is GMT 0. You can run the B35 command to change the SMS report time zone to the local time zone. The SMS report time zone is different from the GPRS data packet time zone. When **SMS minute** is **0**, the time zone is **GMT 0**. When **SMS minute** is a value ranging from -32768 to 32767, set time zones.
Example	
GPRS Sending	@@O29,353358017784062,B35,480*3C\r\n
GPRS Reply	$$O28,353358017784062,B35,OK*01\r\n *After the above command is run successfully, the tracker SMS time zone is changed to UTC+08:00 (China time zone).*

3.21 Setting SMS Event Characters – B91

GPRS Sending	B91,*SMS event code,SMS header*
GPRS Reply	B91,OK
Description	Header: a maximum of 16 bytes
Example	
GPRS Sending	@@R31,353358017784062,B91,1,SOS*F0\r\n
GPRS Reply	$$R28,353358017784062,B91,OK*06\r\n *After you press the SOS button (input 1), the tracker will send an alarm SMS whose header is SOS to a preset authorized phone number.*

3.22 Setting Event Authorization – B99

GPRS Sending	B99,<SMS>/<0>,<Phone number location>/<Authorized phone number>,<Operation code>, [Event code 1]……[Event code n] B99,<CALL>/<1>,<Phone number location>/<Authorized phone number>,<Operation code>, [Event code 1]……[Event code n] B99,<GPRS>/<2>,<Operation code>, [Event code 1]……[Event code n] B99,<CAMERA>/<3>,<Operation code>, [Event code 1]……[Event code n] B99,<BUZZER>/<4>,<Operation code>, [Event code 1]……[Event code n].
GPRS Reply	B99,<SMS>/<0>,<Phone number location>,<Authorized phone number>, [Event code 1]……[Event code n] B99,<CALL>/<1>,<Phone number location>,<Authorized phone number>, [Event code 1]……[Event code n]

	B99,<GPRS>/<2>,[*Event code 1*]……[*Event code n*]
	B99,<CAMERA>/<3>,[*Event code 1*]……[*Event code n*]
	B99,<BUZZER>/<4>,[*Event code 1*]……[*Event code n*]
Description	Fields SMS, CALL, GPRS, CAMERA, and BUZZER can be presented by 0–4 in decimal string.
	Operation codes GET, SET, ADD, and DEL can be presented by 0–3 in decimal string. These characters are not case-sensitive.
	Note: Ensure that an authorized phone number is set by using the A71 command or the parameter configuration tool before the B99 command is used to set the SMS/CALL event code. The tracker compares the authorized phone number issued by B99 with the authorized phone number (excluding +86 characters) of the tracker. If the phone numbers are the same, the new event code will be stored. If the phone numbers are inconsistent, an error SMS will be sent.
Example	
GPRS Sending	@@B34,863070010825791,B99,gprs,get*BC\r\n
GPRS Reply	$$B33,863070010825791,B99,1,17,18*B5\r\n

3.23 Notifying the Tracker of Sending an SMS – C02

GPRS Sending	C02, X,*Phone number*,*Content*
GPRS Reply	C02,OK
Description	Used for the platform to notify the tracker of sending an SMS to a mobile phone.
	X = 0: in TEXT mode
	X = 1: in Unicode mode
	Phone number: a maximum of 16 digits
	Content: a maximum of 140 characters
	After receiving the message, the tracker sends Content information to specified phone numbers.
Example	
GPRS Sending	@@f47,353358017784062,C02,0,15360853789,Meitrack*B1\r\n
GPRS Reply	$$f28,353358017784062,C02,OK*13\r\n

3.24 Reading Device's Firmware Version and SN – E91

GPRS Sending	E91
GPRS Reply	E91,*Version*,*SN*
Description	Read the tracker's firmware version and SN.
Example	
GPRS Sending	@@W25,353358017784062,E91*7D\r\n
GPRS Reply	$$W38,353358017784062,FWV1.00,12345678*1C\r\n

3.25 Restarting the GSM Module – F01

GPRS Sending	F01
GPRS Reply	F01,OK
Description	Restart the GSM module.
Example	
GPRS Sending	@@j25,353358017784062,F01*88\r\n
GPRS Reply	$$j28,353358017784062,F01,OK*19\r\n

3.26 Restarting the GPS Module – F02

GPRS Sending	F02
GPRS Reply	F02,OK
Description	Restart the GPS module.
Example	
GPRS Sending	@@Z25,353358017784062,F02*79\r\n
GPRS Reply	$$Z28,353358017784062,F02,OK*0A\r\n

3.27 Setting the Mileage and Run Time — F08

GPRS Sending	F08,*Run time*,*Mileage*
GPRS Reply	F08,OK
Description	Run time: ● Value range: [0…4294967295] ● Decimal ● Unit: second If you do not want to set the parameter, leave it blank. Mileage: ● Value range: [0…4294967295] ● Decimal ● Unit: meter If you do not want to set the parameter, leave it blank.
Example	
GPRS Sending	@@D40,353358017784062,F08,0,4825000*51\r\n
GPRS Reply	$$D28,353358017784062,F08,OK*FA\r\n

3.28 Deleting SMS/GPRS Cache Data – F09

GPRS Sending	F09,*Number*
GPRS Reply	F09,OK
Description	If the number is **1**, SMS cache data to be sent is deleted. If the number is **2**, GPRS cache data to be sent is deleted.

	If the number is **3**, SMS and GPRS cache data to be sent is deleted.
Example	
GPRS Sending	@@E27,353358017784062,F09,1*CA\r\n
GPRS Reply	$$E28,353358017784062,F09,OK*FC\r\n

3.29 Restoring Initial Settings – F11

GPRS Sending	F11
GPRS Reply	F11,OK
Description	Restore initial settings except the SMS password.
Example	
GPRS Sending	@@[25,353358017784062,F11*7A\r\n
GPRS Reply	$$[28,353358017784062,F11,OK*0B\r\n

If you have any questions, do not hesitate to email us at info@meitrack.com.