MEITRACK GPRS Protocol

For MT80i/MT88/MT90/MVT100/MVT340

MVT380/MVT800 /MVT600/T1/TC68/TC68S

Change History

File Name	MEITRACK GPRS Protocol	Created By	Renny Lee
Project	MT80i/MT88/MT90/MVT100/MVT800 MVT340/MVT380/MVT600/T1/TC68/TC68S	Creation Date Update Date	2010-07-31 2014-09-23
Subproject	GPRS Protocol	Total Pages	56
Version	V1.6	Confidential	Internal Documentation

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*><* *Check code*>\r\n
- GPRS command sent from the tracker to the server:
  $$<*Data identifier*><*Data length*>,<IMEI>,<*Command type*>,<*Command*><* *Check code*>\r\n

1.2 Tracker Command Format (General)

$$<Data identifier><Data length>,<IMEI>,<Command type>,<Event code>,<(-)Latitude>,<(-)Longitude>,<Date and time>,<Status>,<Number of satellites>,<GSM signal status>,<Speed>,<Direction>,<Horizontal positioning accuracy>,<Altitude>,<Mileage>,<Run time>,<Base station information>,<I/O port status>,<Analog input value>,<RFID>/<Picture name>/<Fence number>/<Temperature sensor No.>,<Customized data>,<Protocol version>,<Fuel percentage>,<Temperature sensor 1 value|Temperature sensor 2 value|…Temperature sensor n value><* Check code>\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.)
- Do not input special characters such as < and > when compiling a command.
- All multi-byte data complies with the following sequence: High bytes are prior to low bytes.
- The traffic 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 from the server to the tracker. The header type is ASCII. (Hexadecimal is represented as 0x40.)	@@
$$	Indicates the GPRS data packet header from the tracker to the server. The header type is ASCII. (Hexadecimal is represented as 0x24.)	$$
Data identifier	Has one 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. The data length is decimal. Example: $$<*Data identifier*><*Data length*>,<*IMEI*>,<*Command type*>,<*Command*><* *Check code*>\r\n	25
IMEI	Indicates the tracker IMEI. The number type is ASCII. It has 15 digits generally.	353358017784062
Command type	Is a hexadecimal string. For details, see chapter 2 and chapter 3.	AAA
Event code	Decimal For details, see section 1.4 "Event Code."	1
Latitude **(-)yy.dddddd**	Unit: degree Decimal When a minus (-) exists, the tracker is in the southern hemisphere. When no minus (-) exists, the tracker is in the northern hemisphere.	22.756325 -23.256438

	yy indicates the degree. **dddddd** indicates the decimal part.	
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 -114.821453
Date and time **yymmddHHMMSS**	**yy** indicates year. **mm** indicates month. **dd** indicates date. **HH** indicates hour. **MM** indicates minute. **SS** indicates second. Decimal	091221102631
Status	Indicates the GPS signal status. **A** indicates that the tracker is positioned, and **V** indicates that the tracker is not positioned.	A
Number of satellites	Indicates the number of received GPS satellites. Decimal	5
GSM signal status	Its value ranges from 0 to 31. Decimal	12
Speed	Unit: km/h Decimal	58
Direction	Indicates the driving direction. The unit is degree. When the value is 0 degree, the direction is north. The value ranges from 0 to 359. Decimal	45 90
Horizontal positioning accuracy	The value ranges from 0.5 to 99.9. The smaller the value is, more accurate it is. Decimal When the accuracy value is **0**, the tracker is not positioned. 1 Perfect 2–3 Wonderful 4–6 Good 7–8 Medium 9–20 Low average 21–50 Poor	5
Altitude	Unit: m Decimal	118
Mileage	Unit: m Decimal The value is the accumulative mileage value. The maximum value is 4294967295m. If the value exceeds the maximum value, the value is	564870

	automatically cleared.	
Run time	Unit: second Decimal The value is the accumulative duration value. The maximum value is 4294967295 seconds. If the value exceeds the maximum value, the value is automatically cleared.	2546321
Base station information	The base 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. **Voltage formula of analog AD (AD1, AD2, and AD3):** MVT340/MVT380: (AD x 6)/1024 T1/T3/MVT600/MVT800/MVT100: (AD x 3.3 x 2)/4096 T322: AD/100 **Voltage formula of battery analog (AD4):** MT80i/MT88: (AD4 x 3 x 2)/4096 MVT340/MVT380: (AD4 x 3 x 2)/1024 MT90/T1/T3/MVT100/MVT600/MVT800/TC68/TC68S: (AD4 x 3.3 x 2)/4096 T311/T322: AD4/100 **Voltage formula of external power (AD5):** MVT340/MVT380: (AD5 x 3 x 16)/1024 T1/T3/MVT100/MVT600/MVT800/TC68/TC68S: (AD5 x 3.3 x 16)/4096 T311/T322: AD5/100	123|456|235|1456|222 (Hexadecimal)
RFID	Indicates the IC card identity code. Hexadecimal Only available for GPRS event code 37.	42770680 (hexadecimal)
Picture name	Only available for GPRS event code 39.	0918101221_C2E03
Fence number	Only available for GPRS event code 21.	2
Temperature Sensor No.	The temperature sensor No. is set by command C40. Format: two hexadecimal numbers Note: The number is only available for event codes 50 and 51.	08
Customized data	Reserved A separator still exists.	
Protocol version	Decimal	1

	1–50: Used for all general Meitrack protocols. 50–99: Used for OBD. When the protocol is compatible with the old tracker, the value is empty or the value is 0 by default.	
Fuel percentage	Format: four hexadecimal characters. A high byte indicates the integer bit of the percentage. A low byte indicates the decimal of the percentage. When the fuel sensor type is **0**, the sensor is not connected and the value is empty.	241E (indicates the fuel percentage is 36.30%.)
Temperature sensor No. and value	Format: six hexadecimal characters. The highest byte is the sensor NO. The middle byte is the integer of temperature (-127 to +127). The lowest byte is the decimal part of temperature.	011A09|021A15|061E20 (indicates three temperature sensors. Their numbers are 1, 2, and 6, and temperature is 26.09°C, 26.21°C, and 30.32°C respectively.)
*****	Separates commands from check codes. One byte and ASCII (Hexadecimal is represented as 0x2A)	*
Check code	Two bytes. The parameter indicates the sum of all data packets (excluding the check code and ending mark). It is a hexadecimal character. Example: *$$<Data identifier><Data length>,<IMEI>,<Command type>,<Command><* Check code>*\r\n	BE
\r\n	Two bytes. The parameter is an ending character. The type is ASCII. (Hexadecimal is represented as 0x0d,0x0a.)	\r\n

1.3 Tracker Command Format (For the TC68)

$$<Data identifier><Data length>,<IMEI>,<Command type>,<Event code>,<(-)Latitude>,<(-)Longitude>,<Date and time>,<Status>,<Number of satellites>,<GSM signal status>,<Speed>,<Direction>,<Horizontal positioning accuracy>,<Altitude>,<Mileage>,<Run time>,<Base station information>,<I/O port status>,<Analog input value>,<Auxiliary event information>,<Cutomized data>,<Protocol version>,<Engine rotational speed>,<Engine calculation electrical load>,<Engine antifreeze coolant temperature>,<Fuel consumption of 100 km>,<Intake Air Temperature>,<Oil pressure>,<Atmospheric Pressure>,<Pipe absolute pressure>,<Air flow>,<Throttle position>,<Mileage for one time>,<Remaining fuel percentage>,<Fault code and freeze frame/Ready state><* Check code>\r\n

Note:

- A comma (,) is used to separate data characters. The character type is the ASCII. (Hexadecimal is represented as 0x2C.)
- Do not input special characters such as < and > when compiling a command.
- All multi-byte data complies with the following sequence: High bytes are prior to low bytes.
- The traffic of a GPRS data packet is about 160 bytes.
- Speed and mileage are calculated from OBD data if the tracker can read them. Meanwhile, run time is accumulated. Otherwise, they are calculated from GPS data.
- Storage battery voltage is calculated by analog values of external voltage.
- The OBD protocol version is greater than 50 and smaller than 99. If you use the tracker for the first time, the tracker

protocol version is 50.

- If OBD data is empty, the vehicle data cannot be read by the tracker.

Descriptions about GPRS packets from the tracker are as follows:

Parameter	Description	Example
@@	Indicates the GPRS data packet header from the server to the tracker. The header type is ASCII. (Hexadecimal is represented as 0x40.)	@@
$$	Indicates the GPRS data packet header from the tracker to the server. The header type is ASCII. (Hexadecimal is represented as 0x40.)	$$
Data identifier	Has one 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. The data length is decimal. Example: $$<*Data identifier*><*Data length*>,<*IMEI*>,<*Command type*>,<*Command*><* *Check code*>\r\n	25
IMEI	Indicates the tracker IMEI. The number type is ASCII. It has 15 digits generally.	353358017784062
Command type	Is a hexadecimal string. For details, see chapter 2 and chapter 3.	AAA
Event code	Decimal For details, see section 1.4 "Event Code."	1
Latitude **(-)yy.dddddd**	Unit: degree Decimal When a minus (-) exists, the tracker is in the southern hemisphere. When no minus (-) exists, the tracker is in the northern hemisphere. **yy** indicates the degree. **dddddd** indicates the decimal part.	22.756325-23.256438
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.	114.752146-114.821453
Date and time **yymmddHHMMSS**	**yy** indicates year. **mm** indicates month. **dd** indicates date. **HH** indicates hour. **MM** indicates minute. **SS** indicates second. Decimal	091221102631
Status	Indicates the GPS signal status. **A** indicates that the tracker is positioned, and **V** indicates that the tracker is not positioned.	A
Number of satellites	Indicates the number of received GPS satellites.	5

	Decimal	
GSM signal status	Its value ranges from 0 to 31. Decimal	12
Speed	Unit: km/h Decimal	58
Direction	Indicates the driving direction. The unit is degree. When the value is 0 degree, the direction is north. The value ranges from 0 to 359. Decimal	45 90
Horizontal positioning accuracy	The value ranges from 0.5 to 99.9. The smaller the value is, more accurate it is. Decimal When the accuracy value is **0**, the tracker is not positioned. 1 Perfect 2–3 Wonderful 4–6 Good 7–8 Medium 9–20 Low average 21–50 Poor	5
Altitude	Unit: m Decimal	118
Mileage	Unit: m Decimal The value is the accumulative mileage value. The maximum value is 4294967295m. If the value exceeds the maximum value, the value is automatically cleared.	564870
Run time	Unit: second Decimal The value is the accumulative duration value. The maximum value is 4294967295 seconds. If the value exceeds the maximum value, the value is automatically cleared.	2546321
Base station information	The base 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. **Voltage formula of analog AD (AD1, AD2, and AD3):**	123|456|235|1456|222 (hexadecimal)

	MVT100/MVT340/MVT380: (AD x 6)/1024 T1/T3/MVT600/MVT800: (AD x 3.3 x 2)/4096 T322: AD/100 **Voltage formula of battery analog (AD4):** MT80i/MT88: (AD4 x 3 x 2)/4096 MVT100/MVT340/MVT380: (AD4 x 3 x 2)/1024 MT90/T1/T3/MVT600/MVT800/TC68/TC68S: (AD4 x 3.3 x 2)/4096 T322: AD4/100 **Voltage formula of external power (AD5):** MVT100/MVT340/MVT380: (AD5 x 3 x 16)/1024 T1/T3MVT600/MVT800/TC68/TC68S: (AD5 x 3.3 x 16)/4096 T322: AD5/100		
Auxiliary event information	Fence number	The geo-fence number ranges from 1 to 8 The data is available only when it is required using GPRS event code 20 and 21. Format: Decimal string Note: Only events 20 and 21 contain fence numbers.	2
	Distance of this trip|Time required|Average running speed|Peek speed per hour	**Distance of this trip:** Counted from the time the engine starts to the time the engine stops. Value range: 0–4294967295 Format: decimal string Unit: m **Time required:** Counted from the time the engine starts to the time the engine stops. Value range: 0-4294967295 Format: decimal string Unit: second **Average running speed (only for the duration during which the speed is more than 2 km/h):** Average running speed = Distance of a single trip/Time duration during which the speed is more than 2 km/h Format: decimal string Unit: km/h **Peek speed per hour:** Indicates the highest speed in the trip. Format: decimal string Unit: km/h Note: Event 145 is valid.	1000|1234|123|321 Meaning: The entire trip is 1000m and takes 1234 seconds. The average running speed for duration during which the speed is more than 2 km/h is 123 km/h. The peek speed is 321 km/h.
	Vehicle theft trigger	Format: decimal string	23

	source	Event codes are used to explain causes of triggering a vehicle theft. For details, see section 1.4 "Event Code." Note: Event 58 is valid.	Meaning: The vehicle theft alarm is triggered because the external power is cut off.
	System mark	Format: 4-byte hexadecimal string FEDCBA00 Bit31–bit0 ● Bit0: indicates whether the EEP2 parameter is changed. For details, see the EEP2 communication documentation. Bit0 is released with this document. When bit0 is 0, the EEP2 parameter is not changed. When bit0 is 1, the EEP2 parameter is changed. ● Bit1: indicates the status of the ACC. **Bit 1 = 1** indicates ACC ON. ● Bit2: indicates the arming/disarming status. **Bit 2 = 1** indicates arming. ● Bit3–bit31: reserved for future use. Note: Event 35 is valid.	00000001 Meaning: The EEP2 parameter is changed. The EEP2 parameter, ACC OFF status, and disarming status need to be queried on the server.
Cutomized data	Reserved Customized for external sensor or other values.		
Protocol version	50<=V=99 for OBD devices Default value: 50		50
Engine rotational speed	Value: 0–6500 Unit: rpm(R/M) Decimal		1000
Engine calculation electrical load	Value: 0–100 Unit: % Decimal		50
Engine antifreeze coolant temperature	Value: 0–110 Unit: °C Decimal		100
Fuel consumption of 100 km	Value: 0–50.0 Unit: L/100 km Decimal string, accurate to 1 decimal place		10.5
Intake Air Temperature	Value: 0–80 Unit:°C Decimal		50
Oil pressure	Value: 0–765 Unit: kPa Decimal string, accurate to 1 decimal place		3.7
Atmospheric Pressure	Value: 0–110		80

	Unit: kPa Decimal	
Pipe absolute pressure	Value: 0–100 Unit: kPa Decimal	35
Air flow	Value: 0–30 Unit: g/s Decimal	4
Throttle position	Value: 0–100 Unit: % Decimal	3
Mileage for one time	Counted from the time the engine starts to the time the engine stops. Value: 0–4294967295 Unit: m Decimal	100000
Remaining fuel percentage	Unit: % Decimal	70
Fault code and freeze frame	Only available for fault alarm event 140 The first four characters are a fault code, and then the following characters are a freeze frame and data traffic. A freeze frame is a hexadecimal string. The PID ends with 0x00. Each four characters of data traffic correspond to one PID.	0026…
Ready state	Only available for Ready Status Alarm event 141	FFFFBA21
*****	Separates commands from check codes. One byte and ASCII (Hexadecimal is represented as 0x2A)	*
Check code	Two bytes. The parameter indicates the sum of all data packets (excluding the check code and ending mark). It is a hexadecimal character. *$$<Data identifier><Data length>,<IMEI>,<Command type>,<Command><* Check code>*\r\n Example: @@Q25,353358017784062,A10*6A\r\n Check part: @@Q25,353358017784062,A10* Convert to hexadecimal string: 40 40 51 32 35 2C 33 35 33 33 35 38 30 31 37 37 38 34 30 36 32 2C 41 31 30 2A Sum up from 40 to 2A is 056A, get the low byte 6A, 6A is the check code.	6A
\r\n	Two bytes. The parameter is an ending character. The type is ASCII. (Hexadecimal is represented as 0x0d,0x0a.)	\r\n

1.4 Event Code

OBD-related events are numbered from 129.

Event Code	Event	Default SMS Header (Maximum of 16 Bytes)	Default GPRS Mark Value	Default SMS Mark Value	Default photographing Mark Value
1	**SOS Pressed**	SOS	Y	Y (Only for the first authorized phone number)	Y
2	**Input 2 Active**	Ignition On: MVT100&MVT340&T322 Door Open: MVT380&MVT600&T1&MVT800 In2 Active: Other models	Y	N	N
3	**Input 3 Active**	Ignition On: MVT600&T1 Door Open: MVT800&T322 In3 Active: other models	Y	N	N
4	**Input 4 Active**	Ignition On: MVT380&MVT800 In4 Active: other models	Y	N	N
5	**Input 5 Active**	In5 Active	Y	N	N
9	**Input 1 Inactive (SOS Released)**	In1 Inactive	N	N	N
10	**Input 2 Inactive**	Ignition Off: MVT100&MVT340&T322 Door Close: MVT380&MVT600&T1&MVT800 In2 Inactive: other undefined models	N	N	N
11	**Input 3 Inactive**	Ignition Off: MVT600&T1 Door Close: MVT800&T322 In3 Inactive: other models	N	N	N
12	**Input 4 Inactive**	Ignition Off: MVT380&MVT800 In4 Inactive: other models	N	N	N
13	**Input 5 Inactive**	In5 Inactive: other models	N	N	N
17	**Low Battery**	Low Battery	N	N	N/A
18	**Low External Battery**	Low Ext-Battery	N	N	N/A
19	**Speeding**	Speeding	Y	Y	N
20	**Enter Geo-fence**	Enter Fence N (N means the number of the fence)	Y	Y	N
21	**Exit Geo-fence**	Exit Fence N (N means the number of the fence)	Y	Y	N
22	**External Battery On**	Ext-Battery On Tracker connected: TC68/TC68S	N	N	N
23	**External Battery Cut**	Ext-Battery Cut	N	N	N/A

		Tracker removed: TC68/TC68S			
24	**Lose GPS Signal**	Lose GPS Signal	N	N	N/A
25	**GPS Signal Recovery**	GPS Recovery	N	N	N/A
26	**Enter Sleep**	Enter Sleep	N	N	N/A
27	**Exit Sleep**	Exit Sleep	N	N	N/A
28	**GPS Antenna Cut**	GPS Antenna Cut	N	N	N
29	**Device Reboot**	Power On	N	N	N/A
30	**Impact/Fall**	Impact	Y	N	N
31	**Heartbeat**	/	Y	N/A	N/A
32	**Direction Change**	Direction Change	Y	N	N/A
33	**Track By Distance**	Distance	Y	N	N/A
34	**Reply Current (Passive)**	Now	A/A	A/A	N/A
35	**Track By Time Interval**	Interval	A/A	A/A	N/A
36	**Tow**	Tow	Y	N	N
37	**RFID**	(only for GPRS)	Y	N/A	N
39	**Photo**	(only for GPRS)	A/A	N/A	N/A
50	**Temperature High**	Temp High	N	N	N
51	**Temperature Low**	Temp Low	N	N	N
52	**Fuel Full**	Fuel Full	N	N	N
53	**Fuel Empty**	Fuel Empty	N	N	N
56	**Armed**	Armed	N	N	N/A
57	**Disarmed**	Disarmed	N	N	N/A
65	**Press Input 1 (SOS) to Call**	/	N/A	N	N/A
66	**Press Input 2 to Call**	/	N/A	N	N/A
67	**Press Input 3 to Call**	/	N/A	N	N/A
68	**Press Input 4 to Call**	/	N/A	N	N/A
69	**Press Input 5 to Call**	/	N/A	N	N/A
70	**Reject Incoming Call**	/	N/A	Y	N/A
71	**Get Location by Call**	/	N/A	Y	N/A
72	**Auto Answer Incoming Call**	/	N/A	N	N/A
73	**Listen-in (Voice Monitoring)**	/	N/A	N	N/A
129	**Fast Decelerate**	Fast Decelerate	Y	N	N/A
130	**Fast Accelerate**	Fast Accelerate	Y	N	N/A
131	**RPM High**	RPM High	Y	N	N/A
132	**RPM Recovery to Normal**	RPM Recovery	Y	N	N/A
133	**Idle Overtime (Packing without**	Idle Overtime	Y	N	N/A

	Ignition Off Overtime)				
134	**Idle Recovery (Recovery from Idle overtime)**	Idle Recovery	Y	N	N/A
135	**Fatigue Driving**	Fatigue Driving	Y	N	N/A
136	**Enough Rest after Fatigue Driving Noted: Rest reach 20 mins after fatigue driving**	Enough Rest	Y	N	N/A
137	**Engine Temperature Overheat**	Engine Overheat	Y	N	N/A
138	**Speed Recovery**	Speed Recovery	Y	N	N/A
139	**Maintenance Notice**	Maintenance	Y	N	N/A
140	**Engine Fault**	Engine Fault	Y	N	N/A
141	**Exhaust Emissions Fault**	Exhaust Fault	Y	N	N/A
142	**Health Abnormal**	Health Abnormal	Y	N	N/A
143	**Fuel Low**	Fuel Low	Y	N	N/A
144	**Ignition On**	Ignition On	Y	N	N/A
145	**Ignition Off**	Ignition Off	Y	N	N/A
146	**Halt to Start**	Halt to Start	Y	N	N/A
147	**Start to Halt**	Start to Halt	Y	N	N/A

Note:

- Data in the above figure is the default settings before delivery.
- **Y** indicates that a parameter is set. **N** indicates that a parameter is not set. **N/A** indicates that a parameter is unavailable or reserved. **A/A** indicates that a parameter cannot be changed and is always displayed.
- You can use commands to redefine SMS headers, add or delete marks for different functions.

2 Command List

Type	Description	Applicable Model
A10	Timely Location Query	All
A11	Setting a Heartbeat Packet Reporting Interval	MVT340/380
A12	Setting the Scheduled Tracking Function	All
A13	Setting the Direction Change Report Function	All

A14	Setting the Distance Tracking Function	All
A15	Setting the Parking Scheduled Tracking Function	MVT100/340/380/600/T1/MVT800
A16	Enabling the Parking Scheduled Tracking Function	MVT100/340/380/600/T1/MVT800
A17	Enabling or Disabling the RFID Control OUT1 Function	MVT600/T1
A19	3D Sensor	MT90
A21	Setting GPRS Parameters	All
A22	Setting the DNS Server IP Address	All
A23	Setting the Standby GPRS Server	All
A70	Reading All Authorized Phone Numbers	All
A71	Setting a Combined Function Phone Number	All
A72	Setting a Listen-in Phone Number	All
A73	Setting the Smart Sleep Mode	All
AAA	Automatic Event Report	All
AFF	Deleting a GPRS Event In the Cache Zone	All
B00	Reading an Authorized Phone Number and SMS Event Code Mark	All
B01	Setting an Authorized Phone Number and SMS Event Code Mark	All
B02	Adding an Authorized Phone Number and SMS Event Code Mark	All
B03	Deleting an Authorized Phone Number and SMS Event Code Mark	All
B05	Setting a Geo-Fence	All
B06	Deleting a Geo-Fence	All

B07	Setting the Overspeed Alarm Function	All
B08	Setting the Towing Alarm Function	All
B09	Setting 3D Sensor Sensitivity	MVT100/340/380
B21	Setting the Anti-Theft Function	MVT100/340/380/MVT600/T1/T68S/TC68
B31	Setting Extension Functions	All
B34	Setting a Recording Interval	All (excluding the MVT340)
B35	Setting the SMS Time Zone	All
B36	Setting the GPRS Time Zone	All
B60	Check the Engine First to Determine Tracker Running Status	MVT100/340/380/600/T1/MVT800
B91	Setting an SMS Event	All
B92	Setting a GPRS Event Mark	All
B93	Reading a GPRS Event Mark	All
B96	Setting a Photographing Event Mark	MVT600/T1
B97	Reading a Photographing Event Mark	MVT600/T1
B99	Setting Event Authorization	TC68
C01	Output Control	MVT100/340/380/600/T1/MVT800
C02	The GPRS Platform Control Device Sends an SMS	All
C03	Setting a GPRS Event Transmission Mode	All
C04	Setting the GPRS Cache Data Sending Mode	MVT380
C13	GPRS Information Display	MVT600/T1
C40	Registering a Number for a Temperature Sensor (GPRS)	T1/MVT600/MVT800
C41	Deleting a Registered Temperature Sensor (GPRS)	T1/MVT600/MVT800

C42	Reading the Temperature Sensor SN and Number	T1/MVT600/MVT800
C43	Setting a Temperature Value for the High/Low Temperature Alarm and Logical Name	T1/MVT600/MVT800
C44	Reading Temperature Sensor Parameters (GPRS)	T1/MVT600/MVT800
C45	Checking Temperature Sensor Parameters	T1/MVT600/MVT800
C46	Checking Temperature Sensor Parameters (GPRS)	T1/MVT600/MVT800
C47	Setting Fuel Parameters	T1/MVT600/MVT800
C48	Reading Fuel Parameters	T1/MVT600/MVT800
D00	Obtaining a Picture	MVT600/T1
D01	Obtaining the Picture List	MVT600/T1
D02	Deleting a Picture	MVT600/T1
D03	Real-Time Photograghing	MVT600/T1
D10	Authorizing an RFID	MVT600/T1
D11	Authorizing RFIDs In Batches	MVT600/T1
D12	Checking Whether a RFID Is Authorized	MVT600/T1
D13	Reading an Authorized RFID	MVT600/T1
D14	Deleting an Authorized RFID	MVT600/T1
D15	Deleting Authorized RFIDs In Batches	MVT600/T1
D16	Checking the Verification Code of the Authorized RFID Database	MVT600/T1
D30	Setting Accelerated Speed of the Rush Deceleration Alarm	TC68
D31	Setting Accelerated Speed of the Rush Acceleration Alarm	TC68
D32	Setting Rotational Speed of the Overspeed Alarm	TC68
D33	Setting Temperature of the Overheat Alarm	TC68
D34	Setting Time of the Parking Engine on Alarm	TC68
D35	Setting Time of the Fatigue Driving Alarm	TC68

D36	Setting the Rest Duration after Fatigue Driving	TC68
D42	Reading a Fault Code	TC68
D44	Clearing a Fault Code	TC68
D45	Reading Exhaust Gas Status	TC68
D46	Transferring an SMS From the Platform	TC68
D47	Setting a VIN	TC68
D48	Reading a VIN	TC68
D51	Setting the Vehicle Automatic Diagnosis Function	TC68
D52	Setting Automatic Diagnosis Parameters	TC68
D59	Setting OBD SMS Event Characters	TC68
D63	Setting the Percentage of the Low Fuel Alarm	TC68
D64	Setting Vehicle Emission	TC68
D65	Setting Mileage Between Maintenance Service Points	TC68/TC68S
D66	Setting Maintenance Time	TC68/TC68S
D68	Reading the Vehicle OBD Protocol Version	TC68
E91	Reading the Tracker Firmware Version and SN	All
F01	Restarting the GSM Module	All
F02	Restarting the GPS Module	All
F08	Setting Mileage and Running Time	All
F09	Deleting SMS/GPRS Cache Data	All
F11	Restoring Initial Settings	All
F12	Enabling the GPRS Function	All

3 Command Details

3.1 Timely Location Query (GPRS) – A10

GPRS Setting	A10
GPRS Responding	AAA,34, (-)*Latitude*,(-)*Longitude*,*Date and time*,*Status*,*Number of satellites*,*GSM signal status*,*Speed*,*Direction*,*Horizontal positioning accuracy*,*Altitude*,*Mileage*,*Run time*,*Base station information*,*I/O port status*,*Analog input value*
Description	34 is the GPRS command event code. For details about the event code, see section 1.4 "Event Code."
Applicable Model	All
Example	
GPRS Sending	@@Q25,353358017784062,A10*6A\r\n
GPRS Receiving	$$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 (GPRS) – A11

GPRS Setting	A11,Interval
GPRS Responding	A11,OK
Description	The heartbeat packet function is used for Transmission Control Protocol (TCP) connections when the interval of scheduled GPRS reporting is long. When the interval is **0** (default value), disable the heartbeat packet function. When the interval is a value ranging from 1 to 65535, set the interval in minute.
Applicable Model	MVT380\MVT340
Example	
GPRS Sending	@@S28,353358017784062,A11,10*FD\r\n
GPRS Receiving	$$S28,353358017784062,A11,OK*FE\r\n *After the above command is run successfully, the tracker sends the following information to the server every 10 minutes:* *$$a131,353358017784062,AAA,31,22.913458,114.083183,080229123628,A,9,23,21,83,1,18,1350,127,0|0|10133|4110,0000,169|181|184|2714|919,*4B*

3.3 Setting the Scheduled Tracking Function (GPRS) – A12

GPRS Setting	A12,Interval
GPRS Responding	A12,OK
Description	The interval is in unit of 10 seconds. When the interval is **0**, disable the scheduled GPRS reporting function. The maximum interval is 65535 x 10 seconds. 6 x 10 seconds are recommended.
Applicable Model	All

Example	
GPRS Sending	@@V27,353358017784062,A12,6*D5\r\n
GPRS Receiving	$$V28,353358017784062,A12,OK*02\r\n *After the above command is run successfully, the tracker sends the following information to the platform every one minute:* *$$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 Direction Change Report Function (GPRS) – A13

GPRS Setting	A13,Angle
GPRS Responding	A13,OK
Description	When the driving direction exceeds the preset value, the tracker sends a GPRS data packet about a location to the server. This ensures a continuous smooth trace. When the angle is **0** (default value), disable the direction change report function. When the angle is a value ranging from 1 to 359, set the direction change angle. **30** is recommended.
Applicable Model	All
Example	
GPRS Sending	@@X29,353358017784062,A13,120*37\r\n
GPRS Receiving	$$X28,353358017784062,A13,OK*05\r\n *After the above command is run successfully, if the direction change angle is greater than 120 degree, the tracker sends the following information to the server:* *$$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*
Applicable Model	All

3.5 Setting the Distance Tracking Function – A14

GPRS Setting	A14,Distance
GPRS Responding	A14,OK
Description	When the driving distance is **0** (default value), disable the function of location reporting in a specific distance. When the driving distance is a value ranging from 1m to 4294967295m, set the distance. If the GPRS scheduled tracking and distance tracking functions are both set, reporting complies with the "first reach first report" rule and the interval and distance of next report are re-calculated. 300 is recommended.
Applicable Model	All
Example	
GPRS Sending	@@D30,353358017784062,A14,1000*4A\r\n
GPRS Receiving	$$D28,353358017784062,A14,OK*F2\r\n

	After the above command is run successfully, if the driving distance reaches 1000m, the tracker sends the following information 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 Setting the Parking Scheduled Tracking Function (GPRS) – A15

GPRS Setting	A15,Interval
GPRS Responding	A15,OK
Description	The function applies for vehicle trackers. With the function, the number of GPRS messages is reduced, and thus GPRS traffic is saved. After the A15 function is set, the A16 function is automatically enabled. For details about engine status, see section 3.7 " Enabling the Parking Scheduled Tracking Function (GPRS) – A16." The interval is in unit of 10 seconds. When the interval is **0**, disable the GPRS scheduled reporting function. The maximum interval is 65535 x 10 seconds. Note: If data needs to be sent in a specific interval after the vehicle starts or stops, the function needs to work with the A12 function.
Applicable Model	MVT100/340/380/600/T1/MVT800/TC68/TC68S
Example	
GPRS Sending	@@E27,353358017784062,A15,6*C7\r\n
GPRS Receiving	$$E28,353358017784062,A15,OK*F4\r\n

3.7 Enabling the Parking Scheduled Tracking Function (GPRS) – A16

GPRS Setting	A16,Status
GPRS Responding	A16,OK
Description	The function applies for vehicle trackers. The first positive input (high level) of vehicle trackers must connect to engine status detection. Otherwise, the function is unavailable. The first positive inputs of the MVT100, MVT340, MVT380, MVT600, and T1 are inputs 2, 2, 4, 3, 3 respectively. When the activation status is **1**, enable the parking scheduled tracking function, and GPRS data is sent by the following interval: ● Interval of the A12 function when the engine is on ● Interval of the A15 function when the engine is off When the activation status is **0**, disable the parking scheduled tracking function, and GPRS data is sent by the following interval: ● Interval of the A12 function when the engine is on ● Interval of the A15 function when the engine is off Note: The TC68 can determine whether the engine is activated based on engine rotational speed. The TC68S can determine whether the engine is activated based on

	vehicle battery voltage.
Applicable Model	MVT100/340/380/600/T1/MVT800/TC68/TC68S
Example	
GPRS Sending	@@F27,353358017784062,A16,0*C3\r\n
GPRS Receiving	$$F28,353358017784062,A16,OK*F6\r\n

3.8 Enabling or Disabling the RFID Control OUT1 Function (MVT600/T1) – A17

GPRS Setting	A17,X
GPRS Responding	A17,OK
Description	When *X* is equivalent to 1, the RFID control OUT1 function is available. Ensure that the engine must connect to input 3 and the RFID has been authorized. When *X* is equivalent to 0, disable the RFID control OUT1 function by default. For example, after swiping the authorized RFID card, you must start the engine within one minute. If the time expires, you need to swipe the card again to start the engine. After that, input 3 has been detecting engine status. When input 3 detects that the engine status is ACC ON, the engine is not activated. When input 3 detects that the engine is stopped before one minute, swipe the card to start the engine. For details about how to authorize a RFID, see commands D10 to D15.
Applicable Model	MVT600/T1
Example	
GPRS Sending	@@T27,353358017784062,A17,1*D3\r\n
GPRS Receiving	$$T28,353358017784062,A17,OK*05\r\n

3.9 3D Sensor (MT90) – A19

GPRS Setting	A19,X
GPRS Responding	A19,OK
Description	When wakeup is not required for the sleep mode, X is set to 0. When vibration and wakeup are required for the deep sleep mode, X is set to 1.
Applicable Model	MT90
Example	
GPRS Sending	@@H27,353358017784062,A19,1*C9\r\n
GPRS Receiving	$$H28,353358017784062,A19,OK*F8\r\n

3.10 Setting GPRS Parameters – A21

GPRS Setting	A21,Connection mode,IP address,Port,APN,APN user name,APN password
GPRS Responding	A21,OK
Description	When the connection mode is **0**, disable the GPRS function. When the connection mode is **1**, enable the GPRS function and use the TCP/IP reporting mode.

	When the connection is **2**, enable the GPRS function and use the 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 is required, leave them blank.
Applicable Model	All
Example	
GPRS Sending	@@H61,353358017784062,A21,1,www.trackingmate.com,8500,CMNET,,*DA\r\n
GPRS Receiving	$$H28,353358017784062,A21,OK*F4\r\n

3.11 Setting the DNS Server IP Address – A22

GPRS Setting	A22, DNS server IP address
GPRS Responding	A22,OK
Description	An incorrect DNS server IP address may lead to GPRS data reporting failures after the A21 command is used. Use the A22 command to set the DNS server IP address (confirm the IP address with your domain name provider.). Then use the A21 command to reset the domain name. DNS server IP address: a maximum of 16 bytes
Applicable Model	All
Example	
GPRS Sending	@@K38,353358017784062,A22,75.127.67.90*FD\r\n
GPRS Receiving	$$K28,353358017784062,A22,OK*F8\r\n

3.12 Setting the Standby GPRS Server – A23

GPRS Setting	A23,IP address,port
GPRS Responding	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. This avoids data losses.
Applicable Model	All
Example	
GPRS Sending	@@S45,353358017784062,A23,114.112.54.134,8500*4C\r\n
GPRS Receiving	$$S28,353358017784062,A23,OK*01\r\n

3.13 Reading All Authorized Phone Numbers – A70

GPRS Setting	A70
GPRS Responding	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.
Applicable Model	All
Example	
GPRS Sending	@@T25, 353358017784062,A70*93\r\n
GPRS Receiving	$$T85,353358017784062,A70,13811111111,13822222222,13833333333,13844444444, 13855555555*21\r\n

3.14 Setting a Combined Function Phone Number – A71

GPRS Setting	A71,Phone number 1,Phone number 2,Phone number 3
GPRS Responding	A71,OK
Description	A phone number has a maximum of 16 bytes. Phone numbers are empty by default. Set phone number 1 to an SOS phone number. When the tracker is called by using the phone number, a location SMS, geo-fence alarm, and low battery alarm are received. When the SOS button is pressed, the tracker dials phone numbers 1, 2, and 3 in sequence. The tracker stops dialing when a phone number responds.
Applicable Model	All
Example	
GPRS Sending	@@U61,353358017784062,A71,13811111111,13822222222,13833333333*7D\r\n
GPRS Receiving	$$U28,353358017784062,A71,OK*06\r\n

3.15 Setting a Listen-in Phone Number – A72

GPRS Setting	A72,Listen-in phone number 1,Listen-in phone number 2
GPRS Responding	A72,OK
Description	Authorize a phone number to make a silent call to the tracker. The tracker answers the call automatically and enters the listen-in state. A maximum of two phone numbers can be set. A phone number has a maximum of 16 digits. Phone numbers are empty by default. If no phone number is entered, remain commas and delete related phone numbers.
Applicable Model	Excluding the T322
Example	
GPRS Sending	@@V49,353358017784062,A72,13844444444,13855555555*55\r\n
GPRS Receiving	$$V28,353358017784062,A72,OK*08\r\n

3.16 Setting the Smart Sleep Mode – A73

GPRS Setting	A73,Sleep level
GPRS Responding	A73,OK
Description	When the tracker status is set to Idle, they automatically enter the smart sleep mode. When the sleep level is **0** (default value), disable the sleep mode. When the sleep level is **1**, the tracker enters the general sleep mode. The GSM module

	always works, and the GPS module occasionally enters the sleep mode. The tracker works 25% longer in the general sleep mode than that in the normal working mode. The mode is not recommended for users who set the scheduled tracking in a short interval. In this way, the mode will affect trace integrity. When the sleep level is **2**, the tracker enters the deep sleep mode. If the tracker is not activated after five minutes, the GPS module is stopped, and the GSM module enters the sleep mode. If the tracker is activated, the GPS and GSM modules are waken up. A heartbeat event occurs only in the deep sleep mode. A heartbeat event is uploaded every one hour by default. Activation actions include: SOS alarm, low internal/external battery, external power status, GPS antenna cutoff alarm, towing alarm, high temperature, low temperature, fuel theft, vehicle theft, ACC ON, (button) changes on any input port, vibration, incoming call, SMS receive, conversation, and heartbeat event (The GPS is disabled during heartbeat wakeup.). Note: Whether the MT90 is in the sleep mode cannot be determined by vibration. The MT90 can enter the sleep mode even the tracker vibrates and cannot be waked up by vibration. You can use the A19 command to wake up the MT90. In any condition, you can use an SMS or a GPRS command to disable the sleep mode, and then the tracker exits the sleep mode and returns back to the normal working mode.
Applicable Model	All
Example	
GPRS Sending	@@W27,353358017784062,A73,2*D9\r\n
GPRS Receiving	$$W28,353358017784062,A73,OK*0A\r\n

3.17 Automatic Event Report – AAA

GPRS Event Report	AAA,Command type, (-) Latitude,(-) Longitude,Date and time,Status,Number of satellites,GSM signal status,Speed,Direction,Horizontal positioning accurancy,Altitude,Mileage,Run time,Base station information,I/O port status,Analog input value
Description	When an event occurs, the tracker automatically reports the event to the server.
Applicable Model	All
Example	
GPRS Receiving	*When the SOS button is pressed, the tracker sends 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*

3.18 Deleting a GPRS Event In the Cache Zone – AFF

GPRS Setting	AFF, Number of deleted GPRS events
GPRS Responding	AFF, Number of remaining caches,Command type, (-) Latitude,(-) Longitude,Data and

	time,Status,Number of satellites,GSM signal status,Speed,Direction,Horizontal positioning accuracy,Altitude,Mileage,Run time,Base station information,I/O port status,Analog input value
Description	Number of deleted GPRS events: hexadecimal string. The default value is 1. Number of remaining caches: total number of events in internal flash memory. Hexadecimal string.
Applicable Model	All
Example	
GPRS Sending	@@h27,353358017784062,AFF,1*0B\r\n
GPRS Receiving	$$h28,353358017784062,AFF,OK*3D\r\n

3.19 Reading an Authorized Phone Number and an SMS Event Code Mark – B00

GPRS Setting	B00,Location
GPRS Responding	B00,Location,Phone number,Event code mark
Description	Location: digits 1 to 3, indicating the sequence of authorized phone numbers Phone number: a maximum of 16 bytes. Authorized phone numbers are empty by default. Event code mark: 16 + 8 bytes. Hexadecimal string. The first 16 bytes are marks of event codes 1 to 64. For example, if the SOS button is pressed, one alarm SMS will be sent (event 1), the mark is 0000000000000001. The last eight bytes are marks of event codes 65 to 80. For example, if the SOS and IN2 buttons are pressed (events 65 and 65), the mark is 00000003. For details about event codes, see section 1.4 "Event Code."
Applicable Model	All
Example	
GPRS Sending	@@H27,353358017784062,B00,1*C0\r\n
GPRS Receiving	$$H64,353358017784062,B00,1,13420980279,00000000201C001F00000060*D1\r\n

3.20 Setting an Authorized Phone Number and SMS Event Code Mark – B01

GPRS Setting	B01,Location,Phone number,Event code
GPRS Responding	B01,OK
Description	Location: digits 1 to 3, indicating the sequence of authorized phone numbers Phone number: a maximum of 16 bytes. Phone numbers are empty by default. Event code: If the comma next to the command and event mark are empty, the event code is set to the default value. For details about event codes, see section 1.4 "Event Code."
Applicable Model	All
Example	
GPRS Sending	@@Z41,353358017784062,B01,1,13420980279,1*95\r\n
GPRS Receiving	$$Z28,353358017784062,B01,OK*05\r\n *When the SOS button is pressed, the tracker sends the following information to the server:*

	353358017784062,SOS,22.540768,114.077610,100313100055,A,3,21,1,94,5,255,0,381,,0000,,

3.21 Adding an Authorized Phone Number and SMS Event Code Mark – B02

GPRS Setting	B02,Location,Event code
GPRS Responding	B02,OK
Description	Location: digits 1 to 3, indicating the sequence of authorized phone numbers Event code: For details about event codes, see section 1.4 "Event Code."
Applicable Model	All
Example	
GPRS Sending	@@]30,353358017784062,B02,1,17*65\r\n
GPRS Receiving	$$]28,353358017784062,B02,OK*09\r\n *When the tracker battery is low, the tracker automatically sends a low battery alarm to the first authorized phone number.*

3.22 Deleting an Authorized Phone Number and SMS Event Code Mark – B03

GPRS Setting	B03, Location,Event code
GPRS Responding	B03,OK
Description	Location: digits 1 to 3, indicating the sequence of authorized phone numbers Event code: For details about event codes, see section 1.4 "Event Code."
Applicable Model	All
Example	
GPRS Sending	@@F30,353358017784062,B03,1,17*4F\r\n
GPRS Receiving	Disable the low battery alarm event function: $$F28,353358017784062,B03,OK*F3\r\n

3.23 Setting a Geo-Fence – B05

GPRS Setting	B05,Fence number,Latitude,Longitude,Semidiameter,Alarm for entering a fence,Alarm for exiting a fence
GPRS Responding	B05,OK
Description	Fence number: digits 1 to 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 part. If there are only 4 characters in the decimal part, 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 part. If there are only 4 characters in the decimal part, add two digits 0. Otherwise, the command cannot be used successfully. Semidiameter: The value ranges from 1 to 4294967295. The unit is m. When the alarm for entering a fence is **0**, disable the alarm function.

	When the alarm for entering a fence is **1**, enable the alarm function. When the alarm for exiting a fence is **0**, disable the alarm function. When the alarm for exiting a fence is **1**, enable the alarm function.
Applicable Model	All
Example	
GPRS Sending	@@H57,353358017784062,B05,1,22.913191,114.079882,1000,0,1*96\r\n
GPRS Receiving	$$H28,353358017784062,B05,OK*F7\r\n *When the tracker exits the geo-fence (latitude: 22.913191; longitude: 114.079882; semidiameter: 1000m), the tracker sends the following information to the server:* *$$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*

3.24 Deleting a Geo-Fence – B06

GPRS Setting	B06, Fence number
GPRS Responding	B06,OK
Description	Fence number: digits 1 to 8. Only one geo-fence can be deleted each time by SMS or GPRS command.
Applicable Model	All
Example	
GPRS Sending	@@J27,353358017784062,B06,1*C8\r\n
GPRS Receiving	Delete the first geo-fence: $$J28,353358017784062,B06,OK*FA\r\n

3.25 Setting the Overspeed Alarm Function – B07

GPRS Setting	B07,Alarm speed
GPRS Responding	B07,OK
Description	When the alarm speed is **0** (default value), disable the overspeed alarm function. When the alarm speed is a value ranging from 1 to 255, set the speed limit. The unit is km/h. When the driving speed reaches the value, an overspeed alarm is generated.
Applicable Model	All
Example	
GPRS Sending	@@P28,353358017784062,B07,60*05\r\n
GPRS Receiving	$$P28,353358017784062,B07,OK*01\r\n *When the tracker driving speed reaches 60 km/h, the tracker sends the following information to the server:* *$$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*

3.26 Setting the Towing Alarm Function – B08

GPRS Setting	B08,Vibration duration
GPRS Responding	B08,OK
Description	When the tracker vibration duration exceeds the preset value, the tracker sends an alarm to an authorized phone number or the server. Before using the towing alarm function, ensure that the smart sleep level is set to **2** by using the A73 command and the consecutive vibration duration is set by using the B08 command. Otherwise, the towing alarm function is unavailable. When the consecutive vibration duration is **0** (default value), disable the towing alarm function. When the consecutive vibration duration is a value ranging from 1 to 255, set the waiting time of an alarm caused by consecutive vibration. The unit is second.
Applicable Model	All
Example	
GPRS Sending	@@I27,353358017784062,B08,3*CB\r\n
GPRS Receiving	$$I28,353358017784062,B08,OK*FB\r\n *When the tracker vibrates for more than consecutive three seconds, the tracker sends the following information to the server:* *$$K133,353358017784062,AAA,36,22.916675,114.088813,080229123718,A,10,22,61,31,1,21,6635,395,460|0|1013|4110,0000,164|185|181|2712|915,*A2*

3.27 Setting 3D Sensor Sensitivity (MVT100/MVT340/MVT380) – B09

GPRS Setting	B09,Sensitivity
GPRS Responding	B09,OK
Description	When the sensitivity is a value ranging from 1 to 65535, set the 3D sensor sensitivity level. The smaller the sensitivity value is, the higher the sensitivity level is. The default sensitivity value is **1**.
Applicable Model	MVT100/MVT340/MVT380
Example	
GPRS Sending	@@C28,353358017784062,B09,10*F5\r\n
GPRS Receiving	$$C28,353358017784062,B09,OK*F6\r\n

3.28 Setting the Anti-Theft Function – B21

GPRS Setting	B21,Status
GPRS Responding	B21,OK

Description	When the activation status is **1** (default value), set the anti-theft function. An alarm is generated when the first negative input and first positive input of MVT series trackers excluding SOS are activated. For example, an alarm is generated when input 3 or 4 of the MVT800 is activated or input 2 or 3 of the T322 is activated. When the activation status is **0**, disable the anti-theft function. No alarm is generated when the first negative input and first positive input of MVT series trackers excluding SOS are activated. Note: The function is only available for MVT series, T1, and T322 trackers. The following lists inputs of trackers:

Tracker	Negative Input	Positive Input
MVT100	-	Input 2
MVT340	-	Input 2
MVT380	Input 2	Input 4
MVT600	Input 2	Input 3
T1	Input 2	Input 3
MVT800	Input 3	Input 4

	Note: The TC68 can determine whether the engine is activated based on engine rotational speed. The TC68S can determine whether the engine is activated based on vehicle battery voltage.
Applicable Model	MVT100/340/380/600/T1/MVT800/T1 /TC68/TC68S
Example	
GPRS Sending	@@C27,353358017784062,B21,1*BE\r\n
GPRS Receiving	$$C28,353358017784062,B21,OK*F0\r\n

3.29 Setting Extension Functions – B31

GPRS Setting	B31,AB
GPRS Responding	B31,OK
Description	When A is **0** (default value), enable an indicator. This helps view device running status. When A is **1**, disable an indicator. B: reserved.
Applicable Model	All
Example	
GPRS Sending	@@J28,353358017784062,B31,10*F7\r\n
GPRS Receiving	$$J28,353358017784062,B31,OK*F8\r\n

3.30 Setting a Recording Interval – B34

GPRS Setting	B34,Recording interval
GPRS Responding	B34,OK
Description	Set the interval for recording data to the tracker flash memory when the GPS signal

	exists. Recorded data can only be read by GPSlog and Meitrack Manager. When the recording interval is **0** (default value), disable the recorder function. When the recording interval is a value ranging from 1 to 65535, set the interval. The unit is second.
Applicable Model	Excluding the MVT340
Example	
GPRS Sending	@@N28,353358017784062,B34,60*03\r\n
GPRS Receiving	$$N28,353358017784062,B34,OK*FF\r\n

3.31 Setting the SMS Time Zone – B35

GPRS Setting	B35,SMS minute
GPRS Responding	B35,OK
Description	The default tracker time zone is GMT 0. You can run the B35 command to change the SMS time zone to the local time zone. The SMS time zone is different from the GPRS data packet time zone. When **SMS minute** is **0**, the time zone is **GMT 0** (default time zone). When **SMS minute** is a value ranging from -32768 to 32767, set time zones.
Applicable Model	All
Example	
GPRS Sending	@@O29,353358017784062,B35,480*3C\r\n
GPRS Receiving	$$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).*

3.32 Setting the GPRS Time Zone – B36

GPRS Setting	B36, GPRS minute
GPRS Responding	B36,OK
Description	When **GPRS minute** is **0**, the time zone is **GMT 0** (default time zone). The MS02 can automatically detect the user time zone, so that the GPRS time zone does not need to be changed. Otherwise, inaccurate data occurs. When **GPRS minute** is a value ranging from -32768 to 32767, set time zones.
Applicable Model	All
Example	
GPRS Sending	@@P29,353358017784062,B36,480*3E\r\n
GPRS Receiving	$$P28,353358017784062,B36,OK*03\r\n *After the above command is run successfully, the GPRS time zone is changed to UTC+08:00 (China time zone).*

3.33 Checking the Engine First to Determine Tracker Running Status – B60

GPRS Setting	B60,X
GPRS Responding	B60,OK
Description	When **X** is **1**, check the engine first to determine whether the tracker is moving or stops. This prevents static drift. When **X** is **0**, you do not need to check the engine to determine whether the tracker is moving or stops (default). The first positive input of the tracker connects to engine detection by default.
Applicable Model	MVT100/380/600/T1/MVT800/TC68/TC68S
Example	
GPRS Sending	@@U27,353358017784062,B60,1*D3\r\n
GPRS Receiving	$$U28,353358017784062,B60,OK*05\r\n

3.34 Setting SMS Event Characters – B91

GPRS Setting	B91,Event SMS code,SMS header
GPRS Responding	B91,OK
Description	Header: a maximum of 16 bytes For details, see 1.4 "Event Code."
Applicable Model	Excluding the T322
Example	
GPRS Sending	@@R31,353358017784062,B91,1,SOS*F0\r\n
GPRS Receiving	$$R28,353358017784062,B91,OK*06\r\n *After the SOS button (input 1) is pressed, the tracker sends an alarm SMS whose header is SOS to a preset authorized phone number.*

3.35 Setting a GPRS Event Mark – B92

GPRS Setting	B92,GPRSevent mark
GPRS Responding	B92,OK
Description	Set one or multiple GPRS event marks. For details, see section 1.4 "Event Code." GPRS event mark: a maximum of 16 hexadecimal strings. 64 events (64bits event flag). MSB(bit63) = 1 means that the 64th event is enabled in the GPRS report. MSB(bit63) = 0 means that the 64th event is disabled in the GPRS report. LSB(bit0) = 1 means that the 1st event (SOS) is enabled in the GPRS report. LSB(bit0) = 0 means that the 1st event (SOS) is disabled in the GPRS report.
Applicable Model	All
Example	
GPRS Sending	@@q42,353358017784062,B92,1234567890ABCDEF*62\r\n
GPRS Receiving	$$q28,353358017784062,B92,OK*26\r\n

3.36 Reading a GPRS Event Mark – B93

GPRS Setting	B93
GPRS Responding	B93,GPRS event code mark
Description	Read a GPRS event code mark.
Applicable Model	All
Example	
GPRS Sending	@@V25,353358017784062,B93*7B\r\n
GPRS Receiving	$$V42,353358017784062,B93,00000007E01C001F*B5\r\n

3.37 Setting a Photographing Event Mark (MVT600/T1) – B96

GPRS Setting	B96,Photographing event mark
GPRS Responding	B96,OK
Description	Set one or multiple photographing events. When a preset event occurs, a photo is taken and saved in the Micro SD memory card. In default mode, the tracker will automatically take a photo saved in the Micro SD memory card when the SOS button is pressed. For details about event marks, see section 1.4 "Event Code." Use command D00/D01 to read a photo.
Applicable Model	MVT600/T1
Example	
GPRS Sending	@@A42,353358017784062,B96,0000000000000001*95\r\n
GPRS Receiving	$$A28,353358017784062,B96,OK*FA\r\n

3.38 Reading a Photographing Event Mark (MVT600/T1) – B97

GPRS Setting	B97
GPRS Responding	B97,Photographing event mark
Description	To know which event has enabled the function of taking photos.
Applicable Model	MVT600/T1
Example	
GPRS Sending	@@C25,353358017784062,B97*6C\r\n
GPRS Receiving	$$C42,353358017784062,B97,0000000000000001*60\r\n

3.39 Setting Event Authorization (TC68) – B99

GPRS Setting	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,<BUZZER>/<4>,<Operation code>, [Event code 1]…[Event code n].
GPRS Responding	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,<BUZZER>/<4>,[Event code 1]…[Event code n]
Description	Fields SMS, CALL, GPRS, and BUZZER can be presented in decimal string. Operation codes GET, SET, ADD, and DEL can be presented in decimal string. These characters are not case-sensitive. Note: Ensure that an authorized phone number is set before the B99 command is used to set the SMS/CALL event code. You can use the A71 command or the parameter configuration tool to set an authorized phone number. The tracker compares the authorized phone number issued by B99 with the authorized phone number (excluding +86 characters) in the tracker. If the phone numbers are the same, the event code is stored in newly set mode. If the phone numbers are inconsistent, the operation fails to be performed.
Applicable Model	TC68
Example	
GPRS Sending	@@B34,863070010825791,B99,gprs,get*BC\r\n
GPRS Receiving	$$B33,863070010825791,B99,1,17,18*B5\r\n

3.40 Output Control – C01

GPRS Setting	C01,Speed,ABCDE
GPRS Responding	C01,OK
Description	When the speed is 0, no speed limit exists. That is, when the tracker receives a command, the output control takes effect immediately. When the speed is a value ranging from 1 to 255 (unit: km/h), set the speed limit for output control. When the driving speed is less than the speed limit, the output control takes effect. A=0, close output (OUT1) -open drain A=1, open output (OUT1) -connect to GND A=2, remain previous status. B=0, close output (OUT2) -open drain B=1, open output (OUT2) -connect to GND B=2, remain previous status. C=0, close output (OUT3) -open drain C=1, open output (OUT3) -connect to GND C=2, remain previous status. D=0, close output (OUT4) -open drain D=1, open output (OUT4) -connect to GND D=2, remain previous status.

	E=0, close output (OUT5) -open drain E=1, open output (OUT5) -connect to GND E=2, remain previous status.
Applicable Model	MVT100/340/380/600/T1/MVT800
Example	
GPRS Sending	@@M34,353358017784062,C01,20,10122*18\r\n
GPRS Receiving	$$M28,353358017784062,C01,OK*F9\r\n

3.41 The GPRS Platform Control Device Sends an SMS – C02

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

3.42 Setting a GPRS Event Transmission Mode – C03

GPRS Setting	C03, X
GPRS Responding	C03,OK
Description	X = 0: automatic event report (default) X = 1: Before another event is transmitted, existing event reports need the server's confirmation by the AFF command. This mode is selected when GPRS uses UDP.
Applicable Model	All
Example	
GPRS Sending	@@f27,353358017784062,C03,0*E1\r\n
GPRS Receiving	$$f28,353358017784062,C03,OK*14\r\n

3.43 Setting the GPRS Cache Data Sending Mode – C04

GPRS Setting	C04,X
GPRS Responding	IMEI,C04,OK
Description	X = 0: FIFO First In First Out Mode (default). Data is stored in queue mode. X = 1: FILO First In First Out Mode. Data is stored in stack mode.

Applicable Model	MVT380
Example	
GPRS Sending	@@g27,353358017784062,C04,1*E4\r\n
GPRS Receiving:	$$g28,353358017784062,C04,OK*16\r\n

3.44 GPRS Information Display (MVT600/T1) – C13

GPRS Setting	C13,Level,Sender,Type,Text
GPRS Responding	C13,OK
Description	**The command is used to display the GPRS information sent by the platform on the LCD screen.** Level: Level 0 indicates normal information, while level 1 indicates urgent information. Sender: indicates the sender name. The parameter must be an ASCII character string and have a maximum of 16 bytes. Type: indicates the encoding mode. E = ASCII. U = UNICODE2. Text: indicates the information text and has a maximum of 150 bytes.
Applicable Model	MVT600/T1
Example	
GPRS Sending	@@C47,353358017784062,C13,1,GPRS,E,Test Message*49\r\n
GPRS Receiving	$$C28,353358017784062,C13,OK*EF\r\n

3.45 Registering a Number for a Temperature Sensor (MVT600/T1/MVT800) – C40

GPRS Setting	C40, SN1 & number 1,SN2 & number 2,…,SNn & number n
GPRS Responding	C40, SN1 & number 1 & result, SN2 & number 2 & result,…SNn & number n & result
Description	Commands C40 to C46 are used to read or set a temperature sensor. Installation steps: 1) Check whether the temperature sensor number in AAA GPRS data is 0. 2) If the number is 0, the temperature sensor is not numbered. Then send the C42 command to read the mappings of sensor SNs and numbers. 3) Use the C40 command to number all sensors without numbers and set mapping relationships in the database, such as the IMEI, SN, number, and customized name. 4) If a high or low temperature alarm is required, send the C43 command to set the temperature value and customize a name. You are advised to use the installation path as the name and save the name to the database. 5) If the sensor is pulled out or replaced when the device is online, use the C46 command to check the sensor. If data is inconsistent, use the C40 and C43 commands to set data. The device uploads current temperature data by the AAA event. If the number of any temperature is 0, the temperature sensor is not registered. The platform automatically sends the C42 command to obtain the temperature sensor SN and number list. Find out the sensor whose number is 0, and register it.

	n: The maximum value is 8. SN: unique number to identify a temperature sensor. Eight bytes. Hexadecimal string. The SN is displayed on the platform like 28 1B D5 23 04 00 00 57, which is the same as that on the sensor label. Number: one byte. Hexadecimal. The value ranges from 1 to 254. Registration result: 0x01, 0x02, 0x03, and 0x04 0x01: The registration is successful. 0x02: The number or SN already exists. 0x03: All sensors are registered. 0x04: Registration failed. Hexadecimal.
Applicable Model	MVT600/T1/MVT800
Example (ASCII is used to display examples because hexadecimal characters cannot be displayed.**)**	
GPRS Sending	@@q35,012896001078259,C40,(1BD5#040000W02*50\r\n
GPRS Receiving	$$q36,012896001078259,C40,(1BD5#040000W0201*1B \r\n

3.46 Deleting a Registered Temperature Sensor (MVT600/T1/MVT800) – C41

GPRS Setting	C41,Number 1, Number 2,…Number n
GPRS Responding	C41,Number 1,Result,Number 2,Result,…Number n,Result
Description	Number: registered sensor; hexadecimal. The value ranges from 1 to 254. Result: Decimal. **1** indicates deletion succeeded. **2** indicates that the number is not registered. **3** indicates deletion failed. To delete all registered temperature sensors, send command C41 only. If deletion is successful, **OK** is returned. If not, **Error** is returned.
Applicable Model	MVT600/T1/MVT800
Example	
GPRS Sending	@@n28,012896001078259,C41,01*19\r\n
GPRS Receiving	$$n30,012896001078259,C41,01,1*37\r\n

3.47 Reading the Temperature Sensor SN and Number (MVT600/T1/MVT800) – C42

GPRS Setting	C42
GPRS Responding	C42,SN1 and number 1,SN2 and number 2,…SNn and number n
Description	**SNn**: indicates the n(th) sensor SN, and has eight bytes in hexadecimal format. **Number n**: indicates the n(th) sensor number, and has one byte in hexadecimal format. The value ranges from 0 to 255. If the value is **0**, the temperature sensor is not registered.
Applicable Model	MVT600/T1/MVT800
Example (ASCII is used to display examples because hexadecimal characters cannot be displayed.)	
GPRS Sending	@@m25,012896001078259,C42*89\r\n
GPRS Receiving	$$t45,012896001078259,C42,(B4v#040000R00,(1BD5#040000W00*13\r\n

3.48 Setting a Temperature Value for the High/Low Temperature Alarm and Logical Name (MVT600/T1/MVT800) – C43

GPRS Setting	C43,Number 1/SN1/High temperature value 1/Low temperature value 1/High temperature alarm 1/Low temperature alarm 1/Logical name 1/…Number n/SNn/High temperature value n/Low temperature value n/High temperature alarm 1/Low temperature alarm 1/Logical name n
GPRS Responding	C43,Number 1/Result 1/Number 2/Result 2…/Number n/Result n
Description	n: The maximum value is 8. Number: one byte in hexadecimal format. SN: indicates the temperature sensor SN, and has eight bytes in hexadecimal format. High/Low temperature value: two bytes in hexadecimal format. The first byte is the integer part. When the high bit is **1**, the first byte is a negative integer. When the high bit is **0**, the first byte is a positive integer. The second byte is the decimal part. High temperature alarm: one byte in hexadecimal format. Low temperature alarm: one byte in hexadecimal format. Logical name (customized name): 16 bytes in hexadecimal format. If the name length is less than 16 bytes, add 0x00. There are 15 English characters, and # is located at the end of English characters to distinguish the Unicode and English characters. A maximum of eight Chinese characters can be supported. Chinese characters must be the Unicode. Result: one byte in hexadecimal format. **0x01** indicates setting succeeded. **0x02** indicates that the number is not located. **0x03** indicates that setting failed due to wrong parameters. Note: Separators (/) are not required between parameters.
Applicable Model	MVT600/T1/MVT800
Example (ASCII is used to display examples because hexadecimal characters cannot be displayed.)	
GPRS Sending	@@o57,012896001078259,C43,01(1BD5#040000W<0005000101T1#00000000000000000000000000*3F
GPRS Receiving	$$o28,012896001078259,C43,0101*85

3.49 Reading Temperature Sensor Parameters (MVT600/T1/MVT800) – C44

GPRS Setting	C44
GPRS Responding	C44,Number 1/SN1/High temperature value 1/Low temperature value 1/High temperature alarm 1/Low temperature alarm 1/Logical name 1/…Number n/SNn/High temperature value n/Low temperature value n/High temperature alarm 1/Low temperature alarm 1/Logical name n
Description	n: The maximum value is 8. Number: one byte in hexadecimal format. SN: indicates the temperature sensor SN, and has eight bytes in hexadecimal format. High/Low temperature value: two bytes in hexadecimal format. The first byte is the integer part. When the high bit is **1**, the first byte is a negative integer. When the high bit is **0**, the first byte is a positive integer. The second byte is the decimal part.

	High temperature alarm: one byte in hexadecimal format. Low temperature alarm: one byte in hexadecimal format. Logical name (customized name): 16 bytes in hexadecimal format. If the name length is less than 16 bytes, add 0x00. There are 15 English characters, and # is located at the end of English characters to distinguish the Unicode and English characters. A maximum of eight Chinese characters can be supported. Chinese characters must be the Unicode. Note: Separators (/) are not required between parameters.
Applicable Model	MVT600/T1/MVT800
Example (ASCII is used to display examples because hexadecimal characters cannot be displayed.)	
GPRS Sending	@@r25,012896001078259,C44*90\r\n
GPRS Receiving	$$r274,012896001078259,C44,01(B4v#040000R00000000000000000000 00000000000000000000002(1BD5#040000W00000000000000000000000 00000000000000000000000000000000000000000000000000000000000000 00000000000000000000000000000000000000000000000000000000000000 00000000000000000000000000000000000000000000000000000000000000 00000000000000000000000000000000000000000000000000000000000000 00000000000000000000000000000000000000000000000000000000000000 00000000000000000000*1E\r\n

3.50 Checking Temperature Sensor Parameters (MVT600/T1/MVT800) – C46

GPRS Setting	C46
GPRS Responding	C46,Check value
Description	Check value: two bytes in hexadecimal format. Use CRC-CCITT to calculate parameters of eight temperature sensors (in sequence: number, SN, high temperature value, low temperature value, high temperature alarm, low temperature alarm, and logical name). The calculation result is used as the temperature sensor check code.
Applicable Model	MVT600/T1/MVT800
Example	
GPRS Sending	@@i25,012896001078259,C46*89\r\n
GPRS Receiving	$$i28,012896001078259,C46,12_*F1\r\n

3.51 Setting Fuel Parameters (MVT600/T1/MVT800) – C47

GPRS Setting	C47,Sensor type,Alarm percentage upper limit,Alarm percentage lower limit
GPRS Responding	C47,OK
Description	Sensor type: 0, 1, 2, and 3 ● **0** indicates that any fuel sensor is not connected. ● **1** indicates that a C type of fuel sensor is connected (AD2). ● **2** indicates that a R type of fuel sensor is connected (AD2). ● **3** indicates that a V type of fuel sensor is connected (AD2). For the MVT600 and T1, the AD2 connects to the fuel sensor by default.

	Alarm percentage upper limit: When the value is **0**, the alarm is cancelled. When the value is not 0, GPRS and SMS event marks take effect automatically. When the fuel percentage is higher than or equal to the value, an alarm is generated, and the alarm event code is 52. Alarm percentage lower limit: When the value is **0**, the alarm is cancelled. When the value is not 0, GPRS and SMS event marks take effect automatically. When the fuel percentage is lower than or equal to the value, an alarm is generate, and the alarm event code is 53. If you want to change a parameter, other parameters leave blank and separators (,) must be remained. If you only send the C47 command, all parameters are initialized to 0 and they are decimal characters. R type of fuel sensor: resistance output fuel sensor C type of fuel sensor: capacitance output fuel sensor V type of fuel sensor: voltage output fuel sensor Fuel sensors A53 and A54 are the V type of fuel sensor.
Applicable Model	MVT600/T1/MVT800
Example	
GPRS Sending	@@f33,353358017784062,C47,2,90,10*0A\r\n
GPRS Receiving	$$f28,353358017784062,C47,OK*1C\r\n

3.52 Reading Fuel Parameters (MVT600/T1/MVT800) – C48

GPRS Setting	C48
GPRS Responding	C48,Sensor type,Alarm percentage upper limit,Alarm percentage lower limit
Description	Returned parameters are the same as that set by C47. These parameters are decimal.
Applicable Model	MVT600/T1/MVT800
Example	
GPRS Sending	@@c25,353358017784062,C48*89\r\n
GPRS Receiving	$$c33,353358017784062,C48,2,90,10*D0\r\n

3.53 Obtaining a Picture (MVT600/T1) – D00

GPRS Setting	D00,File name,Picture data packet start number
GPRS Responding	D00,File name,Number of picture data packets,Current picture data packet number,Picture data
Description	Before obtaining a picture from the tracker, use the D01 command to obtain the picture list. File name: Got from the tracker memory card. The file name is unique. Picture data packet start number: indicates the starting sequence number of a picture package. The minimum value is 0, indicating that you read the picture from the first picture package. A picture can be divided into multiple packages. Number of picture data packages: indicates the number of packets of a picture. The minimum number is 1.

	Current picture data packet number: which picture packet is sent. Picture data: hexadecimal. After all picture data is obtained, a picture will be composed automatically. Note: When the tracker receives the D00 command, eight picture packets will be uploaded consecutively. After two seconds, the server sends the D00 command to obtain picture data packets from the ninth picture data packet.
Applicable Model	MVT600/T1
Example	
GPRS Sending	@@O48,353358017784062,D00,0215080432_C2E03.jpg,0*DB\r\n
GPRS Receiving	The example cannot be displayed because of hexadecimal characters.

3.54 Obtaining the Picture List (MVT600/T1) – D01

GPRS Setting	D01,Picture data packet start number
GPRS Responding	D01,Number of picture data packets,Current picture data packet number,Picture name (1)|Picture name (2)|…|Picture name (n)|
Description	Picture name (n): indicates picture names, which are separated by |. Picture data packet start number: indicates the starting sequence number of a picture list. The minimum number is 0. For example, when the value is **0**, you obtain the picture list from the first picture package. When the value is **4**, you obtain the picture list from the fifth picture package. Number of picture data packets: indicates the number of packets of a picture. The minimum number is 1.
Example	
GPRS Sending	@@A27,353358017784062,D01,0*BB\r\n
GPRS Receiving	$$A480,353358017784062,D01,3,0,0506162517_C1E03.jpg|0506162517_C1E11.jpg|0506162624_C1E03.jpg|0506162630_C1E11.jpg|0506162720_C1E03.jpg|0506162721_C1E03.jpg|0215080547_C1E03.jpg|0215080547_C1E11.jpg|0215080626_C1E03.jpg|0215080626_C1E11.jpg|0215080827_C1E03.jpg|0215080827_C1E11.jpg|0215080850_C1E03.jpg|0215080850_C1E11.jpg|0507145426_C1E03.jpg|0507145426_C1E11.jpg|0507145512_C2E03.jpg|0507145512_C2E11.jpg|0215080050_C3E03.jpg|0215080050_C3E11.jpg|0215080459_C3E03.jpg|021508050*41\r\n

3.55 Deleting a Picture (MVT600/T1) – D02

GPRS Setting	D02, Picture name (1)|Picture name (2)|…|Picture name (n)|
GPRS Responding	D02,OK
Description	Picture name (n): indicates the name of the picture to be deleted. Multiple pictures can be deleted. Picture names are separated by |.
Applicable Model	MVT600/T1
Example	
GPRS Sending	@@E110,353358017784062,D02,0506162517_C1E03.jpg|0506162517_C1E11.jpg|0506162624_C1E03.jpg|0506162630_C1E11.jpg|*4E\r\n

GPRS Receiving	$$F28,353358017784062,D02,OK*F4\r\n

3.56 Real-Time Photograghing (MVT600/T1) – D03

GPRS Setting	D03,Camera number,Picture name
GPRS Responding	D03, OK
Description	Camera number: indicates the number of the camera connecting to the tracker. The minimum value is 1, indicating the first camera. The maximum value is generally 2. Picture name: indicates the name of a picture.
Applicable Model	MVT600/T1
Example	
GPRS Sending	@@D46,353358017784062,D03,1,camera picture.jpg*E2\r\n
GPRS Receiving	$$D28,353358017784062,D03,OK*F3\r\n

3.57 Authorizing an RFID (MVT600/T1) –D10

GPRS Setting	D10,RFID(1),RFID(2),…,RFID(n)
GPRS Responding	D10, OK
Description	RFID (n): indicates the authorized RFID. The value ranges from 1 to 4294967295. Decimal. A maximum of 50 RFID cards can be authorized one time.
Applicable Model	MVT600/T1
Example	
GPRS Sending	@@f43,353358017784062,D10,13737431,13737461*17\r\n
GPRS Receiving	$$f28,353358017784062,D10,OK*13\r\n

3.58 Authorizing RFIDs In Batches (MVT600/T1) –D11

GPRS Setting	D11, Start RFID card number,n
GPRS Responding	D11, OK
Description	Start RFID card number: The value ranges from 1 to 4294967295. Decimal. n: indicates the number of batch-authorized RFID cards. Decimal. The maximum value is 128.
Applicable Model	MVT600/T1
Example	
GPRS Sending	@@e36,353358017784062,D11,13737431,1*AA\r\n
GPRS Receiving	$$e28,353358017784062,D11,OK*13\r\n

3.59 Checking Whether a RFID Is Authorized (MVT600/T1) – D12

GPRS Setting	D12,RFID
GPRS Responding	D12, n

Description	RFID: ranges from 1 to 4294967295. Decimal. n: When n is 0, the RFID is not authorized.
Applicable Model	MVT600/T1
Example	
GPRS Sending	@@C34,353358017784062,D12,13737431*2A\r\n
GPRS Receiving	$$C27,353358017784062,D12,0*87\r\n

3.60 Reading an Authorized RFID (MVT600/T1) – D13

GPRS Setting	D13,RFID packet start number
GPRS Responding	D13, Number of RFID packets,Current RFID packet number,RFID(1)RFID(2)…RFID(n)
Description	RFID packet start number: indicates the starting sequence number of the RFID packet. The minimum value is 0. For example, when the value is 0, you obtain the package list from the first RFID packet. When the value is 4, you obtain the package list from the fifth RFID packet. Number of RFID packets: indicates the number of authorized RFID packets. One RFID packet contains a maximum of 100 RFID card numbers. The minimum value is 0. RFID (n): has eight hexadecimal characters.
Applicable Model	MVT600/T1
Example	
GPRS Sending	@@w27,353358017784062,D13,0*F4\r\n
GPRS Receiving	The example cannot be displayed because of hexadecimal characters.

3.61 Deleting an Authorized RFID (MVT600/T1) – D14

GPRS Setting	D14,RFID(1),RFID(2),…,RFID(n)
GPRS Responding	D14, OK
Description	RFID (n): indicates the RFID to be deleted. The value ranges from 1 to 4294967295. Decimal. A maximum of 50 RFIDs can be deleted one time. One SMS (including protocols) cannot exceed 140 bytes.
Applicable Model	MVT600/T1
Example	
GPRS Sending	@@Q34,353358017784062,D14,13723455*3B\r\n
GPRS Receiving	$$Q28,353358017784062,D14,OK*02\r\n

3.62 Deleting Authorized RFIDs In Batches (MVT600/T1) – D15

GPRS Setting	D15,Start RFID card number,n
GPRS Responding	D15, OK
Description	Start RFID card number: ranges from 1 to 4294967295. Decimal. n: indicates the number of RFID cards to be deleted in batches. Decimal. The maximum

	value is 128. When the start card number is a value ranging from 1 to 4294967295 and n is greater than or equal to 65536, all authorized numbers will be deleted.
Applicable Model	MVT600/T1
Example	
GPRS Sending	@@K36,353358017784062,D15,13723455,3*97\r\n
GPRS Receiving	$$K28,353358017784062,D15,OK*FD\r\n

3.63 Checking the Verification Code of the Authorized RFID Database (MVT600/T1) – D16

GPRS Setting	D16
GPRS Responding	D15, XOR
Description	This command is used to check whether the existing authorized RFID database is consistent with that recorded in the server. When the tracker receives the D16 command, the XOR result of all authorized RFIDs is regarded as the database verification code for responding. After the server receives the verification code, compare with the XOR result of all authorized RFIDs recorded in the server. If the result is the same, the existing authorized RFID database is consistent with that recorded in the server. Otherwise, data errors occur in the authorized RFID database.
Applicable Model	MVT600/T1
Example	
GPRS Sending	@@u25,353358017784062,D16*97\r\n
GPRS Receiving	$$u28,353358017784062,D16,18*F7\r\n

3.64 Setting Accelerated Speed of the Rush Deceleration Alarm (TC68) – D30

GPRS Setting	D30,Accelerated speed
GPRS Responding	D30,OK
Description	Unit: m/s^2 Value range: [0,255] When the value is **0**, disable the rush deceleration alarm function. The default value is **4**.
Applicable Model	TC68
Example	
GPRS Sending	@@S28,353358017784062,D30,10*01\r\n
GPRS Receiving	$$S28,353358017784062,D30,OK*02\r\n

3.65 Setting Accelerated Speed of the Rush Acceleration Alarm (TC68) – D31

GPRS Setting	D31,Accelerated speed
GPRS Responding	D31,OK
Description	Unit: m/s^2

	Value range: [0,255] When the value is **0**, disable the rush acceleration alarm function. The default value is **4**.
Applicable Model	TC68
Example	
GPRS Sending	@@V28,353358017784062,D31,10*05\r\n
GPRS Receiving	$$V28,353358017784062,D31,OK*06\r\n

3.66 Setting Rotational Speed of the Overspeed Alarm (TC68) – D32

GPRS Setting	D32,Rotational speed
GPRS Responding	D32,OK
Description	Unit: rpm Value range: [0,65535] When the value is **0**, disable the overspeed alarm function. The default value is **6500**.
Applicable Model	TC68
Example	
GPRS Sending	@@V30,353358017784062,D32,3000*61\r\n
GPRS Receiving	$$V28,353358017784062,D32,OK*07\r\n

3.67 Setting Water Temperature of the Overheat Alarm (TC68) – D33

GPRS Setting	D33,Temperature
GPRS Responding	D33,OK
Description	Unit: °C Value range: [0,255] When the value is **0**, disable the overheat alarm function. The default value is **110**.
Applicable Model	TC68
Example	
GPRS Sending	@@V29,353358017784062,D33,110*39\r\n
GPRS Receiving	$$V28,353358017784062,D33,OK*08\r\n

3.68 Setting Time of the Parking Engine on Alarm (TC68) – D34

GPRS Setting	D34,Time
GPRS Responding	D34,OK
Description	Unit: s Value range: [0,65535] When the value is **0**, disable the parking engine on alarm. The default value is **20**. When the vehicle speed turns 0 but the engine rotational speed is not 0 for over the preset time, the vehicle is stopped but the engine is not stopped. In this way, when the vehicle speed turns a value except 0 or the engine rotational speed is 0, exit the existing state.

Applicable Model	TC68
Example	
GPRS Sending	@@V28,353358017784062,D34,30*0A\r\n
GPRS Receiving	$$V28,353358017784062,D34,OK*09\r\n

3.69 Setting Time of the Fatigue Driving Alarm (TC68) – D35

GPRS Setting	D35,Time
GPRS Responding	D35,OK
Description	Unit: minute Value range: [0,65535] When the value is **0**, the fatigue driving alarm function is disabled. The default value is **240**. Additional condition: The engine rotational speed is not 0. When the engine is stopped for a time period, the rest duration will be calculated again. The rest duration is set by the D36 command.
Applicable Model	TC68
Example	
GPRS Sending	@@V29,353358017784062,D35,180*42\r\n
GPRS Receiving	$$V28,353358017784062,D35,OK*OA\r\n

3.70 Setting the Rest Duration after Fatigue Driving (TC68) – D36

GPRS Setting	D36,Duration
GPRS Responding	D36,OK
Description	Unit: minute Value range: [0, 65535] When the value is **0**, the fatigue driving state cannot exit after a fatigue driving alarm is generated. The default value is **20**. Rest condition: The engine is stopped. When the engine rotational speed is not 0, clear the rest time. After the rest duration exceeds the preset duration, the driving duration will be cleared.
Applicable Model	TC68
Example	
GPRS Sending	@@V29,353358017784062,D36,180*43\r\n
GPRS Receiving	$$V28,353358017784062,D36,OK*0B\r\n

3.71 Reading a Fault Code (TC68) – D42

GPRS Setting	D42
GPRS Responding	D42,Fault code
Description	Every two bytes are a fault code. The first byte is a high byte, and the second byte is a

	low byte.
Applicable Model	TC68
Example	
GPRS Sending	@@V25,353358017784062,D42*77\r\n
GPRS Receiving	With a fault code: $$O30,863070014345689,D42,xxxx*42 No fault code: $$P26,863070014345689,D42,*68
Note	xxxx is hexadecimal characters, such as 2029. Parsing: Convert hexadecimal characters to binary characters (0010 0000 0010 1001). Parsing details are as follows:

00	10	0000	0010	1001
Indicates the fault code type. 00: P 01: C 10: B 11: U	First number of the fault code	Second number of the fault code	Third number of the fault code	Fourth number of the fault code
Parsing result: P2029				

3.72 Clearing a Fault Code (TC68) – D44

GPRS Setting	D44
GPRS Responding	D44,OK
Description	Clear the ECU fault code.
Applicable Model	TC68
Example	
GPRS Sending	@@V25,353358017784062,D44*79\r\n
GPRS Receiving	$$V28,353358017784062,D44,OK*OA\r\n

3.73 Reading Exhaust Gas Status (TC68) –D45

GPRS Setting	D45
GPRS Responding	D45,Ready state
Description	Ready state: four bytes The tracker can read exhaust gas regularly. If exhaust gas is abnormal, automatic reporting can be selected. The platform can determine exhaust gas abnormalities by a command.
Applicable Model	TC68
Example	
GPRS Sending	@@V25,353358017784062,D45*7A\r\n
GPRS Receiving	$$V28,353358017784062,D45,…*02\r\n

3.74 Transferring an SMS From the Platform (TC68) – D46

GPRS Setting	D46,Phone number,SMS format,SMS text
GPRS Responding	D46,OK
Description	Phone number: The device sends an SMS to this phone number. A phone number has a maximum of 16 bytes. SMS format: ● 0: TEXT ● 1: Unicode
Applicable Model	TC68
Example	
GPRS Sending	@@V48,353358017784062,D46,12345678901,0,Meitrack*A2\r\n
GPRS Receiving	$$V28,353358017784062,D46,OK*OC\r\n

3.75 Setting a VIN (TC68) – D47

GPRS Setting	D47,VIN
GPRS Responding	D47,OK
Description	The Vehicle Identification Number (VIN) contains 17characters, which does not include the letters I (i), O (o), or Q (q) (to avoid confusion with numerals 1 and 0). When the tracker cannot read the VIN, set a VIN. When the tracker can read the VIN, the existing VIN will be covered.
Applicable Model	TC68
Example	
GPRS Sending	@@V43,353358017784062,D47,1234567890ASDFGHJ*AC\r\n
GPRS Receiving	$$V28,353358017784062,D47,OK*OD\r\n

3.76 Reading a VIN (TC68) – D48

GPRS Setting	D48
GPRS Responding	D48,VIN
Description	The VIN contains 17characters, which does not include the letters I (i), O (o), or Q (q) (to avoid confusion with numerals 1 and 0).
Applicable Model	TC68
Example	
GPRS Sending	@@V28,353358017784062,D48*80\r\n
GPRS Receiving	$$V43,353358017784062,D48,1234567890ASDFGHJ*75\r\n

3.77 Setting the Vehicle Automatic Diagnosis Function (TC68) – D51

GPRS Setting	D51,flag
GPRS Responding	D51,OK

Description	When **Flag** is **0**, disable the function. The default value is **0**. When **Flag** is **1**, enable the function. Automatic diagnosis condition: The engine is started; idling; temperature 85℃ to 106℃. After the function is enabled and the engine is started, if the engine status meets the three conditions, the vehicle is diagnosed automatically.
Applicable Model	TC68
Example	
GPRS Sending	@@V27,353358017784062,D51,1*D6\r\n
GPRS Receiving	$$V28,353358017784062,D51,OK*08\r\n

3.78 Setting Automatic Diagnosis Parameters (TC68) – D52

GPRS Setting	D52,1,xx,yy,2,xx,yy,3,xx,yy…
GPRS Responding	D52,OK
Description	xx: lower limit; yy: upper limit Only 18 items are included as follows: 1. "Engine calculation load, 0|100,20|50","%" 2. Reserved. Data cannot be configured. 3. "Short-term fuel correction (cylinder block group 1), -20|20,-10|10","%" 4. "Long-term fuel correction (cylinder block group 1), -20|20,-10|10","%" 5. "Short-term fuel correction (cylinder block group 2), -20|20,-10|10","%" 6. "Long-term fuel correction (cylinder block group 2), -20|20,-10|10","%" 7. " Oil pressure,0|765,4.5|5.5","kPa" 8. "Intake air pressure,0|100,29|48","Kpa" 9. "Engine revolution,0|6500,600|1000","Rpm" 10. Reserved. Data cannot be configured. 11. "Ignition advance angle,0|30,10|14","deg" 12. "Intake air temperature,0|80,10|60","degC" 13. "Air flow,0|30,3|6","g/s" 14. "Throttle position,0|100,0|5","%" 15. Reserved. Data cannot be configured. 16. "Vapor pressure,-1832|8192","Pa" 17. "Atmospheric pressure,0|110,60|102","kpa" 18. "Battery voltage,0|15,12|13.6","V"
Applicable Model	TC68
Example	
GPRS Sending	@@V41,353358017784062,D52,1,2,20,2,85,105*78\r\n
GPRS Receiving	$$V28,353358017784062,D52,OK*09\r\n

3.79 Setting OBD SMS Event Characters (TC68) – D59

GPRS Setting	D59,SMS event code,SMS header

GPRS Responding	D59,OK
Description	Header text: a maximum of 16 bytes For details, see the OBD event code.
Applicable Model	TC68
Example	
GPRS Sending	@@R37,353358017784062,D59,129,SpeedUp*28\r\n
GPRS Receiving	$$R28,353358017784062,D59,OK*06\r\n

3.80 Setting the Percentage of the Low Fuel Alarm (TC68) – D63

GPRS Setting	D63,Percentage
GPRS Responding	D63,OK
Description	Unit: % Value range: [0,100] When the value is **0**, disable the low fuel alarm function. The default value is **0**.
Applicable Model	TC68
Example	
GPRS Sending	@@V28,353358017784062,D63,30*0C\r\n
GPRS Receiving	$$V28,353358017784062,D63,OK*0B\r\n

3.81 Setting Vehicle Emission (TC68) – D64

GPRS Setting	D64,Emission
GPRS Responding	D64,OK
Description	If you want to set the emission to **2.0T**, send **D64,0x20**. If you want to set the emission to **1.8T**, send **D64,0x18**. The default emission is 1.6.
Applicable Model	TC68
Example	
GPRS Sending	@@V28,353358017784062,D64,20*0C\r\n
GPRS Receiving	$$V28,353358017784062,D64,OK*0C\r\n

3.82 Setting Mileage Between Maintenance Service Points (TC68\TC68S) – D65

GPRS Setting	D65,Eight mileage points
GPRS Responding	D65,OK
Description	Send eight mileage points. Eight mileage points: (Current mileage + last point mileage interval x 1), (Current mileage + last point mileage interval x 2), (Current mileage + last point mileage interval x 3), (Current mileage + last point mileage interval x 4), (Current mileage + last point mileage interval x 5), (Current mileage + last point mileage interval x 6), (Current mileage + last point mileage interval x 7), (Current mileage + last point mileage interval x 8)

Applicable Model	TC68\TC68S
Example	Set mileage points: 30000, 50000,60000,70000,80000,90000,100000,110000
GPRS Sending	@@V75,353358017784062,D65,30000,50000,60000,70000,80000,90000,100000,110000*EA\r\n
GPRS Receiving	$$V28,353358017784062,D65,OK*OD\r\n

3.83 Setting Maintenance Time (TC68\TC68S) – D66

GPRS Setting	D66,Eight mileage points
GPRS Responding	D66,OK
Description	Send the time point of eight times of maintenance services. Time point: 1990.1.1 to the next maintenance date
Applicable Model	TC68\TC68S
Example	Set the time point. The next maintenance time is 2013.11.22. The first time point is 8726.
GPRS Sending	@@V65,353358017784062,D66,8726,8816,8906,8996,9086,9176,9266,9356*A2\r\n
GPRS Receiving	$$V28,353358017784062,D66OK*E2\r\n

3.84 Reading the Vehicle OBD Protocol Version (TC68) – D68

GPRS Setting	D68
GPRS Responding	D66,Protocol code
Description	Protocol code: one byte. Code descriptions are as follows: 00: Do not support the OBD protocol. 01: vpw 02: pwm 03: can11 (standard can) 04: can29(extension can) 05: kwp2000 06: kwp5bps 07: iso9141 Note: Protocol codes can be read after the engine is started.
Applicable Model	TC68\TC68S
Example	
GPRS Sending	@@B25,863070010825791,D68*66
GPRS Receiving	$$B27,863070010825791,D68,04*60

3.85 Reading the Tracker Firmware Version and SN – E91

GPRS Setting	E91
GPRS Responding	E91,Version,SN
Description	Read the tracker firmware version and SN.

Applicable Model	All
Example	
GPRS Sending	@@W25,353358017784062,E91*7D\r\n
GPRS Receiving	$$W38,353358017784062,FWV1.00,12345678*1C\r\n

3.86 Restarting the GSM Module – F01

GPRS Setting	F01
GPRS Responding	F01,OK
Description	Restart the GSM module.
Applicable Model	All
Example	
GPRS Sending	@@j25,353358017784062,F01*88\r\n
GPRS Receiving	$$j28,353358017784062,F01,OK*19\r\n

3.87 Restarting the GPS Module – F02

GPRS Setting	F02
GPRS Responding	F02,OK
Description	Restart the GPS module.
Applicable Model	All
Example	
GPRS Sending	@@Z25,353358017784062,F02*79\r\n
GPRS Receiving	$$Z28,353358017784062,F02,OK*0A\r\n

3.88 Setting Mileage and Running Time – F08

GPRS Setting	F08,Running time,Mileage
GPRS Responding	F08,OK
Description	Running time: ● Value range: [0, 4294967295] ● Decimal ● Unit: second If the parameter leaves blank, it will not be set. Mileage: ● Value range: [0, 4294967295] ● Decimal ● Unit: m If the parameter leaves blank, it will not be set.
Applicable Model	All
Example	
GPRS Sending	@@D40,353358017784062,F08,0,4825000*51\r\n

GPRS Receiving	$$D28,353358017784062,F08,OK*FA\r\n

3.89 Deleting SMS/GPRS Cache Data – F09

GPRS Setting	F09,Number
GPRS Responding	F09,OK
Description	If the number is 1, delete the SMS cache data to be sent. If the number is 2, delete the GPRS cache data to be sent. If the number is 3, delete the SMS and GPRS cache data to be sent.
Applicable Model	All
Example	
GPRS Sending	@@E27,353358017784062,F09,1*CA\r\n
GPRS Receiving	$$E28,353358017784062,F09,OK*FC\r\n

3.90 Restoring Initial Settings – F11

GPRS Setting	F11
GPRS Responding	F11,OK
Description	Restore initial settings except the password.
Applicable Model	All
Example	
GPRS Sending	@@[25,353358017784062,F11*7A\r\n
GPRS Receiving	$$[28,353358017784062,F11,OK*0B\r\n

3.91 Enabling the GPRS Function – F12

GPRS Setting	F12
GPRS Responding	F12,OK
Description	Enable the GPRS function and set the following GPRS parameters: 1. Set the GPRS connection mode to TCP. 2. Set the interval to 10 minutes. 3. Set the IP address to 125.91.12.222 and port to 8500. 4. Set the APN to cmnet, and leave the APN user name and password blank. Note: Run the F13 command to set an American server.
Applicable Model	All
Example	
GPRS Setting	@@\25,353358017784062,F12*7C\r\n
GPRS Receiving	$$\28,353358017784062,F12,OK*0D\r\n

If you have any questions, send an email to info@meitrack.com.