

# **MEITRACK TC68L/TC68SL/TS299L GPRS Protocol**

**Applicable Model: TC68L/TC68SL/TS299L**

## Change History

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## 1 TC68L/TC68SL/TS299L Command Format

### 1.1 GPRS Command Format

The GPRS command format is as follows:

GPRS command sent from the server to the tracker	@@<Data identifier><Data length>,<IMEI>,<Command code>,<Command content><*Checksum>\r\n
GPRS command sent from the tracker to the server	\$\$<Data identifier><Data length>,<IMEI>,<Command code>,<Command content/Error code><*Checksum>\r\n
Command description	
<ul style="list-style-type: none"> <li>● <b>@@</b>: Indicates the packet header sent from the server to the tracker. Contains 2 characters.</li> <li>● <b>Data identifier</b>: Contains 1 byte. The character type is hexadecimal, and its value ranges from <b>0x41</b> to <b>0x7A</b>. The data identifier in the reply command must be the same as that of the sending command. Otherwise, the command fails to be sent.</li> <li>● A comma "," is used to separate data characters. The character type is the American Standard Code for Information Interchange (ASCII) (hexadecimal: 0x2C).</li> <li>● <b>Data length</b>: Indicates the length of characters from the first separator "," to the ending character "\r\n" (including the first separator and the ending character). The character type is decimal. \$\$&lt;Data identifier&gt;&lt;Data length&gt;,&lt;IMEI&gt;,&lt;Command type&gt;,&lt;Command content&gt;&lt;*Checksum&gt;\r\n</li> <li>● <b>IMEI</b>: Indicates the IMEI number of the GSM module. But the number stored on the flash memory can be changed.</li> <li>● <b>Command code</b>: Consists of letters and digits. For detail, see the chapter 3 "Command Details."</li> <li>● <b>Command content</b>: no more than 1,024 bytes.</li> <li>● <b>*</b>: This is a fixed character. <b>Checksum</b>: Contains 2 hexadecimal characters; indicates the sum of characters from the packet header "\$\$" to the asterisk "*" (including the packet header and asterisk). \$\$&lt;Data identifier&gt;&lt;Data length&gt;,&lt;IMEI&gt;,&lt;Command type&gt;,&lt;Command content&gt;&lt;*Checksum&gt;\r\n</li> <li>● <b>\r\n</b>: Contains 2 bytes. The parameter is an ending character. Hexadecimal: 0x0D 0x0A.</li> <li>● <b>\$\$</b>: Indicates the packet header sent from the tracker to the server. Contains 2 bytes. Hexadecimal: 0x24 0x24.</li> </ul> <p>If there are multiple commands, use the separator "," to separate them. If there is no command and the <b>Command content</b> parameter is required, the separator "," needs to be remained.</p>	

### 1.2 Tracker Command Format

The data format is as follows:

\$\$<Data identifier><Data length>,<IMEI>,<Command type>,<Number of remaining cache records><Number of data packets><Data packet 1><Data packet 2><Data packet 3>...<Data packet N><\*Checksum>\r\n

There is one or multiple data packets. When there are multiple data packets, the data is stored in the form of cache in the flash memory after the network is disconnected. After the network is connected normally, the tracker sends the cached data to the server in batches. When there is only one data packet, it means that this is a piece of real-time data.

The command content in CCE format is as follows:

Parameter	Description	Example
@@ / \$\$	@@: Indicates the GPRS data packet header sent from the server to the device. The header	Hexadecimal: 0x24 0x24 ASCII: \$\$

	<p>type is ASCII (hexadecimal: 0x40).</p> <p>\$\$: Indicates the GPRS data packet header sent from the device to the server. The header type is ASCII (hexadecimal: 0x24).</p>	
Data identifier	Contains one byte. The type is the ASCII, and its value ranges from <b>0x41</b> to <b>0x7A</b> .	Hexadecimal: 0x47 ASCII: G
Data length	<p>Unit: byte. Type: decimal. Indicates the length of characters from the first separator "," to the ending character "\r\n" (including "," and "\r\n"), that is, the content underlined below.</p> <p>\$\$&lt;Data identifier&gt;&lt;Data length&gt;,&lt;IMEI&gt;,&lt;Command type&gt;,&lt;Number of remaining cache records&gt;&lt;Number of data packets&gt;&lt;Data packet 1&gt;&lt;Data packet 2&gt;&lt;Data packet 3&gt;...&lt;Data packet N&gt;&lt;*Checksum&gt;\r\n</p>	Hexadecimal: 0x32 0x30 0x35 ASCII: 205
IMEI	Indicates the device's IMEI number. It has 15 digits generally.	Hexadecimal: 0x38 0x36 0x38 0x39 0x39 0x38 0x30 0x33 0x33 0x320x 34 0x32 0x33 0x33 0x36 ASCII: 868998033242336
Command type	Indicates the type of commands in the device protocol.	Hexadecimal: 0x43 0x43 0x45 ASCII: CCE
The following data is hexadecimal:		
Number of remaining cache records	Contains four bytes; hexadecimal; little-endian	0x00 0x00 0x00 0x00 The number of remaining cache records is 0.
Number of data packets	Contains two bytes; hexadecimal; little-endian	0x01 0x00 The entire message contains only data packet.
The following is the detailed data of each data packet which needs to be parsed by using hexadecimal numbers. This protocol only describes data including only one data packet.		
Length of the current data packet	Contains two bytes; hexadecimal; little-endian. Indicates the length of characters from the "total number of ID in the current data packet" parameter to the last parameter ID of the current data packet.	0xAB 0x00 The length of the current data packet is 171 bytes.
Total number of ID in the current data packet	Contains two bytes; hexadecimal; little-endian	0x28 0x00 There are 40 ID numbers in the data packet.
Number of 1-byte parameter ID	Value range: 0x00–0xFF The length of the following parameter ID numbers is one byte.	0x0C There are 12 parameter ID numbers whose length is one byte. 0x00: The current data packet does not contain any

			parameter ID number whose length is one byte.
GPS positioning status	Parameter ID: 0x05	0x01: The GPS positioning is valid. 0x00: The GPS positioning is invalid. Data type: BYTE	0x01 The GPS positioning is valid.
Number of satellites	Parameter ID: 0x06	Indicates the number of received GPS satellites. Data type: BYTE	0x0A The number of received GPS satellites is 10.
GSM signal strength	Parameter ID: 0x07	Value range: 0x00–0x31 Data type: BYTE	0x1C The GSM signal strength is 28.
Geo-fence number	Parameter ID: 0x1B	The data is available only when the GPRS event code is 20 or 21. Data type: BYTE	0x00 No Enter Geo-fence or Exit Geo-fence alert is generated.
Clutch switch	Parameter ID: 0x93	01: The clutch pedal is pressed. 00: The clutch pedal is released. Only the TC68L supports this ID. Upload data after reading it. Data type: BYTE	0x00 The clutch pedal is released.
Tachograph performance	Parameter ID: 0x94	01: performance analysis 00: normal performance Only the TC68L supports this ID. Upload data after reading it. Data type: BYTE	0x00 The tachograph performance is normal.
Parking brake switch	Parameter ID: 0x95	01: Apply the brake. 00: Do not apply the brake. Only the TC68L supports this ID. Upload data after reading it. Data type: BYTE	0x00 Do not apply the brake.
Cruise control system	Parameter ID: 0x96	01: The cruise control system is switched on. 00: The cruise control system is switched off. Only the TC68L supports this ID. Upload data after reading it. Data type: BYTE	0x00 The cruise control system is switched off.
Accelerator pedal position (%)	Parameter ID: 0x97	1-byte hexadecimal data Only the TC68L supports this ID. Upload data after reading it. Data type: BYTE	0x14 You press down 20% of the accelerator pedal of your vehicle.
CAN bus fuel level (%)	Parameter ID: 0x9D	1-byte hexadecimal data Only the TC68L supports this ID. Upload data after reading it. Data type: BYTE	0x23 The fuel level left is 35%.
Actual engine torque (%)	Parameter ID: 0x9E	1-byte hexadecimal data Only the TC68L supports this ID. Upload data after reading it.	0x12 The actual engine torque is 18%.

		Data type: SINT8	
Actual engine torque at current speed (%)	Parameter ID: 0xA1	1-byte hexadecimal data Only the TC68L supports this ID. Upload data after reading it. Data type: BYTE	0x12 The actual engine torque at current speed is 18%.
Number of 2-byte parameter ID		Value range: 0x00–0xFF The length of the following parameter ID numbers is two bytes.	0x0D There are 13 parameter ID numbers whose length is two bytes. 0x00: The current data packet does not contain any parameter ID number whose length is two bytes.
Speed	Parameter ID: 0x08	Unit: km/h; little-endian Data type: WORD	0x15 0x00 The driving speed is 21 km/h.
Driving direction	Parameter ID: 0x09	The unit is degree. When the parameter value is <b>0</b> , the direction is due north. The parameter value ranges from <b>0</b> to <b>359</b> . Little-endian. Data type: WORD	0x66 0x00 The driving direction is 102 degrees.
Horizontal dilution of precision (HDOP)	Parameter ID: 0x0A	Value range: 5–999 Unit: 1/10; Little-endian Data type: WORD	0x13 0x00 The HDOP is 1.9.
Altitude	Parameter ID: 0x0B	Unit: meter; little-endian Data type: SINT16	0x2D 0x00 The altitude is 45 meters.
AD4	Parameter ID: 0x19	Battery analog <AD4>; Little-endian Voltage formula of analog: AD4/100 When the battery power is full, the voltage is 4.2 V. When the battery power is empty, the voltage is 3.4 V. Formula of remaining battery power (%): (AD4/100-3.4)/0.8 x 100% Data type: WORD	0xA0 0x01 Convert the digits to decimal digits: 416 416/100 = 4.16 The voltage is 4.16V. The remaining battery power is 99%.
AD5	Parameter ID: 0x1A	External power analog <AD5>; Little-endian Voltage formula of analog: AD5/100 Note: When the external power supply is disconnected, the voltage of AD5 is about 2 V instead of 0. Data type: WORD	0x51 0x05 Convert the digits to decimal digits: 1366 1366/100 = 13.66 The voltage of the external power supply is 13.66 V.
New event code	0x40	For details, see the section 1.3 "Event Code." Data type: WORD	0x23 0x00 Convert the digits to decimal digits: 35 The event code is 35.
Vehicle speed	Parameter	2-byte hexadecimal data	0x15 0x00



(based on the tachograph) (km/h)	ID: 0x91	Only the TC68L supports this ID. Upload data after reading it. Data type: WORD	Convert the digits to decimal digits: 21 The vehicle speed is 21 km/h.
Vehicle speed (based on the wheel) (km/h)	Parameter ID: 0x92	2-byte hexadecimal data Only the TC68L supports this ID. Upload data after reading it. Data type: WORD	0x15 0x00 Convert the digits to decimal digits: 21 The vehicle speed is 21 km/h.
Engine speed (rpm)	Parameter ID: 0x99	2-byte hexadecimal data Only the TC68L supports this ID. Upload data after reading it. Data type: WORD	0x12 0x04 Convert the digits to decimal digits: 1042 The engine rotational speed is 1042 rpm.
Engine coolant temperature (deg C)	Parameter ID: 0x9C	2-byte hexadecimal data Only the TC68L supports this ID. Upload data after reading it. Data type: SINT16	0x32 0x00 Convert the digits to decimal digits: 50 The engine coolant temperature is 50°C.
Ambient air temperature (deg C)	Parameter ID: 0x9F	2-byte hexadecimal data Only the TC68L supports this ID. Upload data after reading it. Data type: SINT16	0x28 0x00 Convert the digits to decimal digits: 40 The ambient air temperature is 40°C.
Average fuel consumption per 100 km	Parameter ID: 0xC9	2-byte hexadecimal data. After the digits are converted to decimal digits, the converted value divided by 10 is the actual value. Only the TC68L supports this ID. Upload data after reading it. Data type: WORD	0x32 0x00 Convert the digits to decimal digits: 50 The average fuel consumption per 100 km is 5 L/100 km.
Number of 4-byte parameter ID		Value range: 0x00–0xFF The length of the following parameter ID numbers is four bytes.	0x0E There are 14 parameter ID numbers whose length is four bytes. 0x00: The current data packet does not contain any parameter ID number whose length is four bytes.
Latitude	Parameter ID: 0x02	Unit: millionth of a degree; little-endian Data type: SINT32	0xE6 0x87 0x57 0x01 Convert the digits to decimal digits: 22513638 The latitude is 22.513638 degrees.
Longitude	Parameter ID: 0x03	Unit: millionth of a degree; little-endian Data type: SINT32	0XE6 0x5F 0xCC 0x06 Convert the digits to decimal digits: 114057190 The longitude is 114.057190

			degrees.
Date and time	Parameter ID: 0x04	Contains four bytes; little-endian Unit: second Starting time: 1 January, 2000, 00:00:00 am. Data type: DWORD	0xEA 0x8D 0xA7 0x22 Convert the digits to decimal digits: 581406186
Mileage	Parameter ID: 0x0C	Indicates the total mileage. Unit: meter; little-endian Data type: DWORD	0x56 0x05 0x00 0x00 Convert the digits to decimal digits: 1366 The total mileage is 1,366 meters.
Run time	Parameter ID: 0x0D	Indicates the total time. Unit: second; little-endian Data type: DWORD	0x96 0x1B 0x00 0x00 Convert the digits to decimal digits: 7062 The run time is 7,062 seconds.
System flag	Parameter ID: 0x1C	The data is available only when the GPRS event code is 35. Bit 0: Whether to modify the EEP2 parameter. When the parameter value is <b>1</b> , the EEP2 parameter is modified. Bit 1: Indicates the ACC status. When the parameter value is <b>1</b> , the ACC is on. Bit 2: Indicates the anti-theft status. When the parameter value is <b>1</b> , the device is in the arming state. Bit 3: vibration flag. When the parameter value is <b>1</b> , the device is vibrating. Bit 4: moving flag. When the parameter value is <b>1</b> , the device is moving. Bit 5: Whether to connect the external power supply. When the parameter value is <b>1</b> , the external power supply is connected. Bit 6: Whether the device is charging. When the parameter value is <b>1</b> , the device is charging. Bit 7: Whether to enable the sleep mode. When the parameter value is <b>1</b> , the sleep mode is enabled. Bit 8: Whether to connect the FMS. When the parameter value is <b>1</b> , the FMS is connected. Bit 9: Whether to enable the FMS function. When the parameter value is <b>1</b> , the FMS function is enabled. Bits 10–31: reserved. Data type: DWORD	0x01 0x00 0x00 0x00 Converted to binary digits: 0000 0000 0000 0000 0000 0000 0000 0001 The device's EEP2 parameter is modified.
Total fuel	Parameter	4-byte hexadecimal data	0x01 0x02 0x00 0x00

consumption (L)	ID: 0x98	Only the TC68L supports this ID. Upload data after reading it. Data type: DWORD	Convert the digits to decimal digits: 513 The total fuel consumption is 513 L.
Total engine run time (h)	Parameter ID: 0x9A	Little-endian. After the digits are converted to decimal digits, the converted value divided by 10 is the actual value. Only the TC68L supports this ID. Upload data after reading it. Data type: DWORD	0x12 0x34 0x00 0x01 Convert the digits to decimal digits: 16790546 The total engine run time is 1679054.6 hours.
High resolution vehicle distance (m)	Parameter ID: 0x9B	4-byte hexadecimal data Only the TC68L supports this ID. Upload data after reading it. Data type: DWORD	0x11 0x22 0x00 0x00 Convert the digits to decimal digits: 8712 The total mileage is 8,712 meters.
High resolution total fuel consumption (L)	Parameter ID: 0xA0	Little-endian. After the digits are converted to decimal digits, the converted value divided by 1000 is the actual value. Only the TC68L supports this ID. Upload data after reading it. Data type: DWORD	0x12 0x00 0x01 0x00 Convert the digits to decimal digits: 65554 The total fuel consumption is 65.554 L.
Fuel consumption rate (L/H)	Parameter ID: 0xA2	Little-endian. After the digits are converted to decimal digits, the converted value divided by 100 is the actual value. Only the TC68L supports this ID. Upload data after reading it. Data type: DWORD	0x12 0x00 0x02 0x00 Convert the digits to decimal digits: 131090 The fuel consumption rate is 1310.90 L/H.
Axle weight (kg)	Parameter ID: 0xA3	Little-endian. After the digits are converted to decimal digits, the converted value divided by 10 is the actual value. Only the TC68L supports this ID. Upload data after reading it. Data type: DWORD	0x12 0x34 0x00 0x00 Convert the digits to decimal digits: 13330 The axle weight is 1333.0 kg.
Service distance (km)	Parameter ID: 0xA4	4-byte hexadecimal data Only the TC68L supports this ID. Upload data after reading it. Data type: SINT32	0x22 0x30 0x00 0x00 Convert the digits to decimal digits: 12322 The service distance is 12,322 km.
Instantaneous fuel consumption (km/L)	Parameter ID: 0xA5	Little-endian. After the digits are converted to decimal digits, the converted value divided by 1000 is the actual value. Only the TC68L supports this ID. Upload data after reading it. Data type: DWORD	0x12 0x56 0x00 0x00 Convert the digits to decimal digits: 22034 The instantaneous fuel consumption is 22.034 KM/H.
Number of unfixed-byte		Value range: 0x00–0xFF	0x02

parameter ID		The length of the following parameter ID numbers is eight or 12 bytes, or is unfixed. The ordering of parameter ID numbers is not fixed. For details, see the parameter ID table.	There are two unfixed-byte parameter ID number. 0x00: The current data packet does not contain any parameter ID number whose length is unfixed.
Current base station info	Parameter ID: 0x0E	<p>&lt;Data length&gt;&lt;MCC&gt;&lt;MNC&gt;&lt;LAC&gt;&lt;CELL_ID&gt;&lt;RX_LEVEL&gt;</p> <p>Data length: hexadecimal; indicates the length of the base station data. Unit: byte.</p> <p>MCC: 16-bit unsigned; little-endian; indicates the Mobile Country Code.</p> <p>MNC: 16-bit unsigned; little-endian; indicates the Mobile Network Code.</p> <p>LAC: 16-bit unsigned; little-endian; indicates the Location Area Code.</p> <p>CELL_ID: 32-bit unsigned; little-endian; indicates the cell ID.</p> <p>RX_LEVEL: 16-bit signed; little-endian; indicates the signal strength.</p> <p>Data type: STRUCT</p>	<p>0x0C 0xCC 0x01 0x01 0x00 0x45 0xA5 0x8B 0xD4 0xE9 0x01 0xBB 0xFF</p> <p>0x0C: The data length is 12 bytes.</p> <p>0xCC 0x01: The MCC is 460.</p> <p>0x01 0x00: The MNC is 01.</p> <p>0x45 0xA5: The LAC is 42309.</p> <p>0x8B 0xD4 0xE9 0x01: The cell ID is 32101515.</p> <p>0xBB 0xFF: The signal strength is -69 dbm.</p>
Additional info about the ignition off event	Parameter ID: 0X4A	<p>&lt;ID_Len&gt;&lt;OneLen&gt;&lt;OneTime&gt;&lt;AvrSpeed&gt;&lt;MaxSpeed&gt;</p> <p>ID_Len: Indicates the length of this ID. Contains one byte.</p> <p>OneLen: Indicates the travel distance of the journey. Contains four bytes; little-endian; unit: meter.</p> <p>OneTime: Indicates the travel time of the journey. Contains four bytes; little-endian; unit: second.</p> <p>AvrSpeed: Indicates the average speed of the journey. Contains two bytes; little-endian; unit: km/h.</p> <p>MaxSpeed: Indicates the maximum speed of the journey. Contains two bytes; little-endian; unit: km/h.</p> <p>The data is available only when the GPRS event code is 145.</p>	<p>0x0C 0x01 0x00 0x00 0x00 0x02 0x00 0x00 0x00 0x01 0x00 0x02 0x00 0x0C: The data length is 12 bytes.</p> <p>0x01 0x00 0x00 0x00: The travel distance of the journey is one meter.</p> <p>0x02 0x00 0x00 0x00: The travel time of the journey is two seconds.</p> <p>0x01 0x00: The average speed of the journey is 1 km/h.</p> <p>0x02 0x00: The maximum speed of the journey is 2 km/h.</p>
The current data packet ends here.			
*		Contains one byte. It is used to separate the command content from the checksum. ASCII (hexadecimal: 0x2A)	*
Checksum		Contains two bytes. Indicates the sum of	If the sum result is <b>0x27</b>

	hexadecimal characters from the packet header "\$\$" to the asterisk "*" (including the packet header and asterisk). <u>\$\$&lt;Data identifier&gt;&lt;Data length&gt;,&lt;IMEI&gt;,&lt;Command type&gt;,&lt;Hexadecimal data packet&gt;&lt;*Checksum&gt;</u> \r\n	<b>0x62</b> , send the checksum 62 (low byte 0x62) in ASCII format, that is, <b>0x36 0x32</b> . Hexadecimal: 0x36 0x32 ASCII: 62
\r\n	Contains two bytes. This is an ending character. The type is ASCII (hexadecimal: 0x0D,0x0A).	\r\n

### 1.3 Event Code

Event Code	Event	Default SMS Header (At Most 16 Bytes)
1	SOS Pressed	SOS
17	Low Battery	Low Battery
18	Low External Battery	Low Ext-Battery
19	Speeding	Speeding
20	Enter Geo-fence	Enter Fence N ( <i>N</i> means the number of the fence)
21	Exit Geo-fence	Exit Fence N ( <i>N</i> means the number of the fence)
22	External Battery On	Ext-Battery On
23	External Battery Cut	Ext-Battery Cut
24	GPS Signal Lost	GPS Signal Lost
25	GPS Signal Recovery	GPS Recovery
26	Enter Sleep	Enter Sleep
27	Exit Sleep	Exit Sleep
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
36	Tow	Tow
40	Power Off	Power Off
70	Reject Incoming Call	/
71	Get Location by Call	/
129	Harsh Braking (Only supported by the TC68L)	Harsh Braking
130	Harsh Acceleration (Only supported by the TC68L)	Fast Accelerate
131	RPM High (Only supported by the TC68L)	RPM High
132	RPM Recovery to Normal (Only supported by the TC68L)	RPM Recovery
133	Idle Overtime (Only supported by the TC68L)	Idle Overtime

134	Idle Recovery (Only supported by the TC68L)	Idle Recovery
135	Fatigue Driving (Only supported by the TC68L)	Fatigue Driving
136	Enough Rest after Fatigue Driving (Only supported by the TC68L)	Enough Rest
137	Engine Temperature Overheat (Only supported by the TC68L)	Engine Overheat
138	Speed Recovery (Only supported by the TC68L)	Speed Recovery
139	Maintenance Notice	Maintenance
144	Ignition On (Only supported by the TC68L)	Ignition On
145	Ignition Off (Only supported by the TC68L)	Ignition Off
146	Start Moving (Only supported by the TC68L)	Start Moving
147	Stop Moving (Only supported by the TC68L)	Stop Moving

## 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
A14	Tracking by Distance
A15	Setting the Parking Scheduled Tracking Function
A16	Enabling the Parking Scheduled Tracking Function
A21	Setting GPRS Parameters
A23	Setting the Standby GPRS Server
A70	Reading All Authorized Phone Numbers
A71	Setting Authorized Phone Numbers
A72	Setting Listen-in Phone Numbers
A73	Setting the Smart Sleep Mode
B05	Setting a Geo-Fence
B06	Deleting a Geo-Fence
B07	Setting the Speeding Alert
B08	Setting the Towing Alert
B10	Fast Setting the Towing Alert
B11	Setting a Polygonal Geo-Fence
B31	Turning off the LED Indicator
B34	Setting a Log Interval
B35	Setting the SMS Time Zone
B36	Setting the GPRS Time Zone
B91	Setting SMS Event Characters
B99	Setting Event Authorization
C02	Notifying the Device of Sending an SMS
C03	Setting a GPRS Event Transmission Mode

D30	Setting the Maximum Acceleration Threshold of the Harsh Braking Alert (Only for the TC68L)
D31	Setting the Maximum Acceleration Threshold of the Harsh Acceleration Alert (Only for the TC68L)
D32	Setting the Maximum Rotational Speed Threshold of the Engine Speeding Alert (Only for the TC68L)
D33	Setting the Maximum Temperature Threshold of the High Coolant Temperature Alert (Only for the TC68L)
D34	Setting the Idling Time (Only for the TC68L)
D35	Setting the Driver Fatigue Time (Only for the TC68L)
D36	Setting the Rest Time After Driver Fatigue (Only for the TC68L)
D64	Setting the Vehicle Gas Emission (Only for the TC68L)
D65	Setting the Maintenance Mileage (Only for the TC68L)
D66	Setting Maintenance Time (Only for the TC68L)
D73	Allocating GPRS Cache and GPS Log Storage Space (Only for the TC68L)
E91	Reading Device's Firmware Version and SN
F00	Restarting the GSM and GPS Module
F01	Restarting the GSM Module
F02	Restarting the GPS Module
F08	Setting the Mileage and Run Time
F09	Deleting SMS or GPRS Cache Data
F11	Restoring Initial Settings

### 3 Command Details

#### 3.1 Real-Time Location Query – A10

GPRS Sending	A10
GPRS Reply	\$\$<Data identifier><Data length>,<IMEI>,<CCE>,<Number of remaining cache records><Number of data packets><Data packet about event 34><*Checksum>\r\n
Description	<b>34:</b> Indicates the event code of the GPRS command.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@A25,865789020991321,A10*62\r\n
GPRS Reply	\$\$A118,865789020991321,CCE,<00 00 00 00 01 00 54 00 12 00 06 01 22 05 00 06 00 07 15 14 00 15 00 04 08 00 00 09 14 01 0A E7 03 0B 00 00 06 02 25 87 57 01 03 E3 60 CC 06 04 41 3A 2D 20 0C 74 0D 00 00 0D EC 50 03 00 1C 00 00 00 00 02 0E 0C CC 01 01 00 45 A5 8B D4 E9 01 01 FF 1D 08 00 25 86 A7 0B 0A D5 FF>*1D\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)

	<p>connection open when the interval of scheduled GPRS reporting is long.</p> <p>Interval = 0: function disabled (default).</p> <p>Interval = [1...65535]: function enabled. Set the heartbeat packet reporting interval. Unit: minute.</p> <p>The heartbeat function is available only in conjunction with deep sleep mode. When the device enters the deep sleep mode, a heartbeat packet will be sent at the specified interval. A heartbeat packet is to confirm the device is online, and positioning data is invalid.</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@\$28,353358017784062,A11,10*FD\r\n
GPRS Reply	\$\$S28,353358017784062,A11,OK*FE\r\n <i>After the above command is sent successfully, the device will send a GPRS heartbeat packet to the platform every 10 minutes in sleep mode.</i>

### 3.3 Tracking by Time Interval – A12

GPRS Sending	A12,Interval
GPRS Reply	A12,OK
Description	<p>Interval unit: x10 seconds</p> <p>Interval = 0: function disabled.</p> <p>The maximum time interval is 65535 x 10 seconds.</p> <p>Recommended value: 6 x 10 seconds</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@V27,353358017784062,A12,6*D5\r\n
GPRS Reply	\$\$V28,353358017784062,A12,OK*02\r\n <i>After the above command is sent successfully, the device will send a GPRS data packet to the platform every one minute.</i>

### 3.4 Setting the Cornering Report – A13

GPRS Sending	A13,Angle
GPRS Reply	A13,OK
Description	<p>When the driving angle exceeds the preset value, the device will send a GPRS data packet with location information to the server, which ensures a smoother route on the platform.</p> <p>Angle = 0: function disabled (default).</p> <p>Angle = [1...359]: function enabled.</p> <p>Recommended value: 30</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@X29,353358017784062,A13,120*37\r\n
GPRS Reply	\$\$X28,353358017784062,A13,OK*05\r\n <i>After the above command is sent successfully, if the cornering angle is greater than 120</i>



	<i>degrees, the device will send a GPRS data packet to the server.</i>
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### 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. Set the distance. Unit: meter. Recommended value: 300
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@D30,353358017784062,A14,1000*4A\r\n
GPRS Reply	\$\$D28,353358017784062,A14,OK*F2\r\n <i>After the above command is sent successfully, if the driving distance reaches 1000 meters, the device will send a data packet to the server.</i>

### 3.6 Setting the Parking Scheduled Tracking Function – A15

GPRS Sending	A15,Interval
GPRS Reply	A15,OK
Description	The function is available for vehicle trackers only. 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 will be automatically enabled. For details about engine status, see the section 3.7 "Enabling the Parking Scheduled Tracking Function – A16." Interval unit: x10 seconds Interval = 0: function disabled. The maximum time interval is 65535 x 10 seconds. Note: If data needs to be sent at the specified time interval after the vehicle starts or stops, the function needs to work with the A12 function. For details, see A12 and A16 commands.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@E27,353358017784062,A15,6*C7\r\n
GPRS Reply	\$\$E28,353358017784062,A15,OK*F4\r\n

### 3.7 Enabling the Parking Scheduled Tracking Function – A16

GPRS Sending	A16,Status
GPRS Reply	A16,OK
Description	<b>The function is available for vehicle trackers only. The first positive input port (high level) of the device must be connected to engine detection. Otherwise, the function is unavailable.</b> When the status value is 1, the parking scheduled tracking function is enabled, and

	<p>GPRS data is sent at the following interval:</p> <p>Engine on: Data is sent at the interval of the A12 command.</p> <p>Engine off: Data is sent at the interval of the A15 command.</p> <p>When the status value is <b>0</b>, the parking scheduled tracking function is disabled, and GPRS data is sent at the following interval:</p> <p>Engine on: Data is sent at the interval of the A12 command.</p> <p>Engine off: Data is sent at the interval of the A15 command.</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@F27,353358017784062,A16,0*C3\r\n
GPRS Reply	\$\$F28,353358017784062,A16,OK*F6\r\n

### 3.8 Setting GPRS Parameters – A21

GPRS Sending	A21,Connection mode,IP address,Port,APN,APN user name,APN password
GPRS Reply	A21,OK
Description	<p>Connection mode = 0: function disabled.</p> <p>Connection mode = 1: function enabled; use the TCP/IP reporting mode.</p> <p>Connection mode = 2: function enabled; use the UDP reporting mode.</p> <p>IP address: IP address or domain name. A maximum of 32 bytes are supported.</p> <p>Port: a maximum of 5 digits</p> <p>APN/APN user name/APN password: a maximum of 32 bytes respectively</p> <p>If no user name and password are required, leave them blank.</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@H58,353358017784062,A21,1,server.meigps.com,8800,CMNET,,*A0
GPRS Reply	\$\$H28,353358017784062,A21,OK*F4\r\n

### 3.9 Setting the Standby GPRS Server – A23

GPRS Sending	A23,IP address,Port
GPRS Reply	A23,OK
Description	<p>IP address: a maximum of 32 bytes</p> <p>Port: a maximum of 5 digits</p> <p>When the device fails to send data to the active server set by the A21 command, data will be automatically sent to the standby server to prevent data loss.</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@S44,353358017784062,A23,182.92.69.175,8800*35\r\n
GPRS Reply	\$\$S28,353358017784062,A23,OK*01\r\n

### 3.10 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

	<i>number 1,Listen-in phone number 2</i>
Description	Read all authorized phone numbers.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@T25,353358017784062,A70*93\r\n
GPRS Reply	\$\$T85,353358017784062,A70,13811111111,13822222222,13833333333,13844444444,13855555555*21\r\n

### 3.11 Setting Authorized Phone Numbers – A71

GPRS Sending	<i>A71,Phone number 1,Phone number 2,Phone number 3</i>
GPRS Reply	A71,OK
Description	<p>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.</p> <p>Phone number 1: SOS phone number. When you call the device by using the phone number, you will receive an SMS notification about the location, geo-fence alert and low battery alert.</p> <p>When the SOS button is pressed, the device will dial phone numbers 1, 2, and 3 in sequence. It will stop dialing when a phone number responds.</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@U61,353358017784062,A71,13811111111,13822222222,13833333333*7D\r\n
GPRS Reply	\$\$U28,353358017784062,A71,OK*06\r\n

### 3.12 Setting Listen-in Phone Numbers – A72

GPRS Sending	<i>A72,Listen-in phone number 1,Listen-in phone number 2</i>
GPRS Reply	A72,OK
Description	<p>When you call the device by using authorized listen-in phone numbers, the device will answer the call automatically and enter the listen-in state. In this way, the device will not make any sound.</p> <p>Listen-in phone number: A maximum of two phone numbers can be set. Each phone number has a maximum of 16 digits. If no phone numbers are set, leave them blank. Phone numbers are empty by default.</p> <p>If no phone numbers are set and commas are remained, phone numbers set before will be deleted.</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@V49,353358017784062,A72,13844444444,13855555555*55\r\n
GPRS Reply	\$\$V28,353358017784062,A72,OK*08\r\n

### 3.13 Setting the Smart Sleep Mode – A73

GPRS Sending	<i>A73,Sleep level</i>
GPRS Reply	A73,OK

Description	<p>Set the automatic smart sleep mode when the device is idle.</p> <p>Sleep level = 0: function disabled (default).</p> <p>Sleep level = 1: normal sleep. The GSM module always works, and the GPS module occasionally enters the sleep mode. The device works 25% longer in the normal sleep mode than that in the normal working mode. This mode is not recommended for short interval tracking because it will affect the route precision.</p> <p>Sleep level = 2: deep sleep. If no event is triggered after five minutes, the GPS module will stop working and the GSM module will enter the sleep mode. Once an event is triggered, the GPS and GSM modules will be woken up. The above actions will be cycled. A heartbeat event is triggered only in the deep sleep mode and is uploaded every one hour by default. Triggering events include the SOS alert, low power alert for internal battery, low power alert for external battery, external power status, GPS antenna cut-off alert, towing alert, high temperature, low temperature, fuel theft, vehicle theft, ACC ON, (button) changes in any input port, vibration, incoming call, SMS receiving, call, and heartbeat event (GPS invalid during heartbeat wakeup).</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@W27,353358017784062,A73,2*D9\r\n
GPRS Reply	\$\$W28,353358017784062,A73,OK*0A\r\n

### 3.14 Setting a Geo-Fence – B05

GPRS Sending	B05,Geo-fence number,Latitude,Longitude,Radius,Enter Geo-fence alert,Exit Geo-fence alert
GPRS Reply	B05,OK
Description	<p>Geo-fence number: The parameter value ranges from <b>1</b> to <b>8</b>. A maximum of eight geo-fences can be set.</p> <p>Latitude: Indicates the latitude of the geo-fence center; decimal; accurate to six digits placed after the decimal point. If there are only four digits placed after the decimal point, add two digits 0. Otherwise, the command cannot be used successfully.</p> <p>Longitude: Indicates the longitude of the geo-fence center; decimal; accurate to six digits placed after the decimal point. If there are only four digits placed after the decimal point, add two digits 0. Otherwise, the command cannot be used successfully.</p> <p>Radius: The parameter value ranges from <b>1</b> to <b>4294967295</b>. Unit: meter. Take coordinates of the above latitude and longitude as the center point and draw a circle with this radius.</p> <p>Enter Geo-fence alert = 0: function disabled.</p> <p>Enter Geo-fence alert = 1: function enabled.</p> <p>Exit Geo-fence alert = 0: function disabled.</p> <p>Exit Geo-fence alert = 1: function enabled.</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@H57,353358017784062,B05,1,22.913191,114.079882,1000,0,1*96\r\n
GPRS Reply	<p>\$\$H28,353358017784062,B05,OK*F7\r\n</p> <p><i>When the device exits the geo-fence (latitude: 22.913191; longitude: 114.079882; radius: 1000 meters), it will send a GPRS data packet about an Exit Geo-fence alert to the server.</i></p>

### 3.15 Deleting a Geo-Fence – B06

GPRS Sending	B06, <i>Geo-fence number</i>
GPRS Reply	B06,OK
Description	Geo-fence number: The parameter value ranges from <b>1</b> to <b>8</b> . Only one geo-fence can be deleted each time by sending an SMS or GPRS command.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@J27,353358017784062,B06,1*C8\r\n
GPRS Reply	\$\$J28,353358017784062,B06,OK*FA\r\n <i>After the above command is sent successfully, the first geo-fence will be deleted.</i>

### 3.16 Setting the Speeding Alert – B07

GPRS Sending	B07, <i>Driving speed,Buzzer flag</i>
GPRS Reply	B07,OK
Description	Driving speed = 0: function disabled (default). Driving speed = [1...255]: function enabled. When the driving speed reaches the preset value, a speeding alert will be sent. Unit: km/h.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@P28,353358017784062,B07,60*05\r\n
GPRS Reply	\$\$P28,353358017784062,B07,OK*01\r\n

### 3.17 Setting the Towing Alert – B08

GPRS Sending	B08, <i>Consecutive vibration time</i>
GPRS Reply	B08,OK
Description	When the device's consecutive vibration time exceeds the preset value, the device will send an alert to an authorized phone number or the server. Before using the towing alert function, use the A73 command to set the smart sleep level to <b>2</b> and use the B08 command to set the consecutive vibration time. Otherwise, the towing alert function will be unavailable. Consecutive vibration time = 0: function disabled (default). Consecutive vibration time = [1...255]: function enabled. Set the consecutive vibration time. Unit: second.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@I27,353358017784062,B08,3*CB\r\n
GPRS Reply	\$\$I28,353358017784062,B08,OK*FB\r\n <i>After the above command is sent successfully, if the device vibrates for more than three consecutive seconds, it will send a GPRS data packet about a towing alert to the server.</i>

### 3.18 Fast Setting the Towing Alert – B10

GPRS Sending	B10, <i>Consecutive vibration time,Idling time</i>
GPRS Reply	B10,OK
Description	<p>Consecutive vibration time = 0: function disabled (default).</p> <p>Consecutive vibration time = [1...255]: function enabled. Set the consecutive vibration time. Unit: second.</p> <p>Idling time: The default parameter value is <b>2</b>. Unit: minute.</p> <p>Idling time = 0: The power-saving mode is disabled.</p> <p>Idling time = [1...255]: The power-saving function is enabled. When the idling time exceeds the preset value, the device will enter the power-saving mode.</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@I29,353358017784062,B10,5,5*29\r\n
GPRS Reply	\$\$I28,353358017784062,B10,OK*F4\r\n

### 3.19 Setting a Polygonal Geo-Fence – B11

GPRS Sending	B11, <i>Geo-fence number,Latitude 1,Longitude 1,Latitude 2,Longitude 2...Latitude N,Longitude N,Enter Geo-fence alert,Exit Geo-fence alert</i>
GPRS Reply	B11,OK
Description	<p>Geo-fence number: The parameter value ranges from <b>1</b> to <b>8</b>. (The maximum value varies depending on customization projects.)</p> <p>Latitude: accurate to 6 digits placed after the decimal point. For example, 22.512517 or -22.512517.</p> <p>Longitude: accurate to 6 digits placed after the decimal point. For example, 114.057200 or -114.057200.</p> <p>Enter Geo-fence alert: The parameter value is <b>0</b> or <b>1</b>. <b>0</b>: An alert will not be generated when the device enters the geo-fence. <b>1</b>: An alert will be generated when the device enters the geo-fence.</p> <p>Exit Geo-fence alert: The parameter value is <b>0</b> or <b>1</b>. <b>0</b>: An alert will not be generated when the device exits the geo-fence. <b>1</b>: An alert will be generated when the device exits the geo-fence.</p> <p>If the command only contains the parameter <b>Geo-fence number</b>, related geo-fences will be deleted.</p> <p>If the geo-fence is circular, the command to be sent is <b>B11,Geo-fence number,Latitude,Longitude,Radius (meter),Enter Geo-fence alert,Exit Geo-fence alert</b>.</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@I59,353358017784062,B11,5,31,22.913458,114.083183,100,1,1*F5\r\n
GPRS Reply	\$\$I28,353358017784062,B11,OK*F5\r\n

### 3.20 Turning off the LED Indicator – B31

GPRS Sending	B31,A
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GPRS Reply	B31,OK
Description	A = 00: The device's LED indicator is turned on (default). The LED indicator can be used to confirm the device's running status. A = 10: The device's LED indicator is turned off.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@J28,353358017784062,B31,10*F7\r\n
GPRS Reply	\$\$J28,353358017784062,B31,OK*F8\r\n

### 3.21 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. When there is no GPS signal, data will not be recorded. <b>Recorded logs can only be read by GPSLog or Meitrack Manager software.</b> Log interval = 0: function disabled (default). Log interval = [1...65535]: function enabled. Set the log interval. Unit: second.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@N28,353358017784062,B34,60*03\r\n
GPRS Reply	\$\$N28,353358017784062,B34,OK*FF\r\n

### 3.22 Setting the SMS Time Zone – B35

GPRS Sending	B35,SMS minute
GPRS Reply	B35,OK
Description	The default time zone of the device is GMT 0. You can run the B35 command to change the time zone of an SMS report to the local time zone. The time zone of an SMS report is different from that of a GPRS data packet. SMS minute = 0: The time zone is GMT 0. SMS minute = [-32768...32767], set time zones.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@O29,353358017784062,B35,480*3C\r\n
GPRS Reply	\$\$O28,353358017784062,B35,OK*01\r\n <i>After the above command is sent successfully, the device's SMS time zone will be changed to UTC+08:00 (China time zone).</i>

### 3.23 Setting the GPRS Time Zone – B36

GPRS Sending	B36,GPRS minute
GPRS Reply	B36,OK
Description	GPRS minute = 0: The time zone is GMT 0 (default). The MS02 platform can automatically

	<p>detect users' time zone, so that the GPRS time zone does not need to be changed. Please maintain the default GPRS time zone at GMT 0. If the GPRS time zone is changed, data will be inaccurate.</p> <p>GPRS minute = [-32768...32767]: Set time zones.</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@P29,353358017784062,B36,480*3E\r\n
GPRS Reply	<p>\$\$P28,353358017784062,B36,OK*03\r\n</p> <p><i>After the above command is sent successfully, the GPRS time zone will be changed to UTC+08:00 (China time zone).</i></p>

### 3.24 Setting SMS Event Characters – B91

GPRS Sending	B91,SMS event code,SMS header
GPRS Reply	B91,OK
Description	Header: a maximum of 16 bytes
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@R31,353358017784062,B91,1,SOS*F0\r\n
GPRS Reply	<p>\$\$R28,353358017784062,B91,OK*06\r\n</p> <p><i>After the above command is sent successfully and the SOS button (input 1) is pressed, the device will send an SMS alert whose header is SOS to preset authorized phone numbers.</i></p>

### 3.25 Setting Event Authorization – B99

GPRS Sending	<p>B99,&lt;SMS&gt;/&lt;0&gt;,&lt;Phone number location&gt;/&lt;Authorized phone number&gt;,&lt;Operation code&gt;,[Event code 1]...[Event code n]</p> <p>B99,&lt;CALL&gt;/&lt;1&gt;,&lt;Phone number location&gt;/&lt;Authorized phone number&gt;,&lt;Operation code&gt;,[Event code 1]...[Event code n]</p> <p>B99,&lt;GPRS&gt;/&lt;2&gt;,&lt;Operation code&gt;,[Event code 1]...[Event code n]</p> <p>B99,&lt;CAMERA&gt;/&lt;3&gt;,&lt;Operation code&gt;,[Event code 1]...[Event code n]</p> <p>B99,&lt;BUZZER&gt;/&lt;4&gt;,&lt;Operation code&gt;,[Event code 1]...[Event code n]</p> <p>B99,&lt;OUT1&gt;/&lt;5&gt;,&lt;Operation code&gt;,[Event code 1]...[Event code n]</p> <p>B99,&lt;OUT2&gt;/&lt;6&gt;,&lt;Operation code&gt;,[Event code 1]...[Event code n]</p>
GPRS Reply	<p>B99,&lt;SMS&gt;/&lt;0&gt;,&lt;Phone number location&gt;,&lt;Authorized phone number&gt;,[Event code 1]...[Event code n]</p> <p>B99,&lt;CALL&gt;/&lt;1&gt;,&lt;Phone number location&gt;,&lt;Authorized phone number&gt;,[Event code 1]...[Event code n]</p> <p>B99,&lt;GPRS&gt;/&lt;2&gt;,[Event code 1]...[Event code n]</p> <p>B99,&lt;CAMERA&gt;/&lt;3&gt;,[Event code 1]...[Event code n]</p> <p>B99,&lt;BUZZER&gt;/&lt;4&gt;,[Event code 1]...[Event code n]</p> <p>B99,&lt;OUT1&gt;/&lt;5&gt;,&lt;Operation code&gt;,[Event code 1]...[Event code n]</p> <p>B99,&lt;OUT2&gt;/&lt;6&gt;,&lt;Operation code&gt;,[Event code 1]...[Event code n]</p>
Description	Fields SMS, CALL, CAMERA, GPRS, BUZZER, OUT1, and OUT2 can be presented by 0–6 in



	<p>decimal string.</p> <p>Operation codes GET, SET, ADD, and DEL can be presented by 0–3 in decimal string. These characters are not case-sensitive.</p> <p>Note: Before using the B99 command to set the SMS or CALL event code, ensure that an authorized phone number is set in advance by using the A71 command or the parameter configuration tool. The device will compare the authorized phone number included in the B99 command with the authorized phone number (excluding +86 characters) set before. If the phone numbers are the same, the new event code will be stored. If not, an SMS with error information will be sent.</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@B34,863070010825791,B99,gprs,get*BC\r\n
GPRS Reply	\$\$B33,863070010825791,B99,1,17,18*B5\r\n

### 3.26 Notifying the Device of Sending an SMS – C02

GPRS Sending	C02,X,Phone number,Content
GPRS Reply	C02,OK
Description	<p>This command is used for the platform to notify the device of sending an SMS to a mobile phone.</p> <p>X = 0: in TEXT encoding mode</p> <p>X = 1: in Unicode encoding mode</p> <p>Phone number: a maximum of 16 digits</p> <p>Content: a maximum of 140 characters</p> <p>After receiving this message, the device will send the <b>Content</b> parameter to specified phone numbers.</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@f47,353358017784062,C02,0,15360853789,Meitrack*B1\r\n
GPRS Reply	\$\$f28,353358017784062,C02,OK*13\r\n

### 3.27 Setting a GPRS Event Transmission Mode – C03

GPRS Sending	C03,X
GPRS Reply	C03,OK
Description	<p>X = 0: automatic event report (default)</p> <p>X = 1: Before another event is transmitted, existing event reports need to be confirmed and deleted on the server by using the AFF command. Select this mode when the GPRS connection uses UDP.</p>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@f27,353358017784062,C03,0*E1\r\n
GPRS Reply	\$\$f28,353358017784062,C03,OK*14\r\n

### 3.28 Setting the Maximum Acceleration Threshold of the Harsh Braking Alert – D30

GPRS Sending	D30, <i>Harsh acceleration value</i>
GPRS Reply	D30,OK
Description	Harsh acceleration value: Indicates the maximum acceleration threshold of the harsh braking alert. Unit: m/s <sup>2</sup> Value range: 0–255. When the parameter value is <b>0</b> , the harsh braking alert is disabled. The default value is <b>4</b> .
Applicable Model	TC68L
<b>Example</b>	
GPRS Sending	@@c27,353358017784062,D30,4*E3\r\n
GPRS Reply	\$\$c28,353358017784062,D30,OK*12\r\n

### 3.29 Setting the Maximum Acceleration Threshold of the Harsh Acceleration Alert – D31

GPRS Sending	D31, <i>Harsh acceleration value</i>
GPRS Reply	D31,OK
Description	Harsh acceleration value: Indicates the maximum acceleration threshold of the harsh acceleration alert. Unit: m/s <sup>2</sup> Value range: 0–255. When the parameter value is <b>0</b> , the harsh acceleration alert is disabled. The default value is <b>4</b> .
Applicable Model	TC68L
<b>Example</b>	
GPRS Sending	@@c27,353358017784062,D31,4*E4\r\n
GPRS Reply	\$\$c28,353358017784062,D31,OK*13\r\n

### 3.30 Setting the Maximum Rotational Speed Threshold of the Engine Speeding Alert – D32

GPRS Sending	D32, <i>Rotational speed</i>
GPRS Reply	D32,OK
Description	Rotational speed: Indicates the maximum rotational speed threshold of the engine speeding alert. Unit: r/m (rpm) Value range: 0–65535. When the parameter value is <b>0</b> , the engine speeding alert is disabled. The default value is <b>6500</b> .
Applicable Model	TC68L
<b>Example</b>	
GPRS Sending	@@c30,353358017784062,D32,6500*76\r\n
GPRS Reply	\$\$c28,353358017784062,D32,OK*14\r\n

### 3.31 Setting the Maximum Temperature Threshold of the High Coolant Temperature Alert – D33

GPRS Sending	D33, <i>Temperature</i>
GPRS Reply	D33,OK
Description	<p>Temperature: Indicates the maximum temperature threshold of the high coolant temperature alert.</p> <p>Unit: °C</p> <p>Value range: 0–255. When the parameter value is <b>0</b>, the high coolant temperature alert is disabled. The default value is <b>110</b>.</p>
Applicable Model	TC68L
<b>Example</b>	
GPRS Sending	@@c29,353358017784062,D33,110*46\r\n
GPRS Reply	\$\$c28,353358017784062,D33,OK*15\r\n

### 3.32 Setting the Idling Time (GPRS/SMS) – D34

GPRS Sending	D34, <i>Time</i>
GPRS Reply	D34,OK
Description	<p>Time: When the driving speed is 0 and the engine rotational speed is not 0 for more than <i>T</i> (idling time), the device is in the idling state. When the driving speed is not 0 or the engine rotational speed is 0, the device exits the idling state.</p> <p>Unit: minute</p> <p>Value range: 0–65535. When the parameter value is <b>0</b>, the idling overtime alert is disabled. The default value is <b>20</b>.</p>
Applicable Model	TC68L
<b>Example</b>	
GPRS Sending	@@c28,353358017784062,D34,20*16\r\n
GPRS Reply	\$\$c28,353358017784062,D34,OK*16\r\n

### 3.33 Setting the Driver Fatigue Time – D35

GPRS Sending	D35, <i>Time</i>
GPRS Reply	D35,OK
Description	<p>Time: Indicates the driver fatigue time, which is used to remind a driver that he drives for a long time and need to have a rest. When the engine rotational speed is not 0, the driving time starts to be calculated.</p> <p>Note: When the rest time exceeds the time preset by the D36 command, the driving time will be reset to 0. When the engine rotational speed is not 0, the rest time will be reset to 0.</p> <p>Unit: minute</p> <p>Value range: 0–65535. When the parameter value is <b>0</b>, the driver fatigue alert is disabled. The default value is <b>240</b>.</p>
Applicable Model	TC68L

Example	
GPRS Sending	@@c29,353358017784062,D35,240*4C\r\n
GPRS Reply	\$\$c28,353358017784062,D35,OK*17\r\n

### 3.34 Setting the Rest Time After Driver Fatigue – D36

GPRS Sending	D36,Time
GPRS Reply	D36,OK
Description	<p>Time: Indicates the rest time after driver fatigue. When the engine is off (ignition off), the rest time after driver fatigue starts to be calculated.</p> <p>Note: When the rest time exceeds the time preset by the D36 command, the driving time will be reset to 0. When the engine rotational speed is not 0, the rest time will be reset to 0.</p> <p>Unit: minute</p> <p>Value range: 0–65535. When the parameter value is <b>0</b>, the device cannot exit the driver fatigue state after a driver fatigue alert is generated. The default value is <b>20</b>.</p>
Applicable Model	TC68L
Example	
GPRS Sending	@@c28,353358017784062,D36,20*18\r\n
GPRS Reply	\$\$c28,353358017784062,D36,OK*18\r\n

### 3.35 Setting the Engine Displacement – D64

GPRS Sending	D64,Engine displacement
GPRS Reply	D64,OK
Description	The parameter value divided by 10 is the actual time. The default parameter value is 1.5, that is, the command is <b>D64,15</b> .
Applicable Model	TC68L
Example	
GPRS Sending	@@c28,353358017784062,D64,15*1D\r\n
GPRS Reply	\$\$c28,353358017784062,D64,OK*19\r\n

### 3.36 Setting the Maintenance Mileage – D65

GPRS Sending	D65,Eight mileage points
GPRS Reply	D65,OK
Description	<p>Send eight maintenance mileage points.</p> <p>Eight mileage points: (Current mileage + Distance interval between the current and next maintenance mileage service x 1), (Current mileage + Distance interval between the current and next maintenance mileage service x 2), (Current mileage + Distance interval between the current and next maintenance mileage service x 3), (Current mileage + Distance interval between the current and next maintenance mileage service x 4), (Current mileage + Distance interval between the current and next maintenance mileage service x 5), (Current mileage + Distance interval between the current and next maintenance</p>

	<i>mileage service x 6), (Current mileage + Distance interval between the current and next maintenance mileage service x 7), (Current mileage + Distance interval between the current and next maintenance mileage service x 8)</i>
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	Set mileage points: 40000,50000,60000,70000,80000,90000,100000,110000
GPRS Sending	@@V75,353358017784062,D65,40000,50000,60000,70000,80000,90000,100000,110000*EB\r\n
GPRS Reply	\$\$V28,353358017784062,D65,OK*OD\r\n

### 3.37 Setting Maintenance Time – D66

GPRS Sending	D66, <i>Eight time points</i>
GPRS Reply	D66,OK
Description	Send maintenance eight time points. Time point: Indicates the days of the next maintenance service after 1st January 1990.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	Set time points. The next maintenance time is 22 November 2013, so the first time point to be sent is 8726.
GPRS Sending	@@V65,353358017784062,D66,8726,8816,8906,8996,9086,9176,9266,9356*A2\r\n
GPRS Reply	\$\$V28,353358017784062,D66OK*E2\r\n

### 3.38 Allocating GPRS Cache and GPS Log Storage Space – D73

GPRS Sending	D73,X,Y
GPRS Reply	D73,OK/<Error code>
Description	X: Set the storage percentage of GPRS cache. The parameter value is a decimal character. Y: Set the storage percentage of GPS logs. The parameter value is a decimal character. The sum of X and Y must be 100.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@Q31,865328022075252,D73,50,50*90\r\n
GPRS Reply	\$\$Q28,865328022075252,D73,OK*02\r\n

### 3.39 Reading Device's Firmware Version and SN – E91

GPRS Sending	E91
GPRS Reply	E91, <i>Version,SN</i>
Description	This command is used to read the device's firmware version and SN.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@W25,353358017784062,E91*7D\r\n
GPRS Reply	\$\$W38,353358017784062,FWV1.00,12345678*1C\r\n

### 3.40 Restarting the GSM and GPS Module – F00

GPRS Sending	F00,GSM,GPS
GPRS Reply	F00,OK
Description	GSM: The parameter value is <b>0</b> or <b>1</b> . <b>0</b> : no operation. <b>1</b> : Restart the GSM module. GPS: The parameter value is <b>0</b> or <b>1</b> . <b>0</b> : no operation. <b>1</b> : Restart the GPS module. This command is used to restart the GSM and GPS modules.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@j25,353358017784062,F00*87\r\n
GPRS Reply	\$\$j28,353358017784062,F00,OK*18\r\n

### 3.41 Restarting the GSM Module – F01

GPRS Sending	F01
GPRS Reply	F01,OK
Description	This command is used to restart the GSM module.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@j25,353358017784062,F01*88\r\n
GPRS Reply	\$\$j28,353358017784062,F01,OK*19\r\n

### 3.42 Restarting the GPS Module – F02

GPRS Sending	F02
GPRS Reply	F02,OK
Description	This command is used to restart the GPS module.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@Z25,353358017784062,F02*79\r\n
GPRS Reply	\$\$Z28,353358017784062,F02,OK*0A\r\n

### 3.43 Setting the Mileage and Run Time – F08

GPRS Sending	F08,Run time,Mileage
GPRS Reply	F08,OK
Description	Run time: The parameter value ranges from <b>0</b> to <b>4294967295</b> . Decimal; unit: second. If you do not want to set the parameter, leave it blank. Mileage: The parameter value ranges from <b>0</b> to <b>4294967295</b> . Decimal; unit: meter. If you do not want to set the parameter, leave it blank.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@D40,353358017784062,F08,0,4825000*51\r\n
GPRS Reply	\$\$D28,353358017784062,F08,OK*FA\r\n

### 3.44 Deleting SMS or GPRS Cache Data – F09

GPRS Sending	F09, <i>Number</i>
GPRS Reply	F09,OK
Description	Number = 1: SMS cache data to be sent is deleted. Number = 2: GPRS cache data to be sent is deleted. Number= 3: SMS and GPRS cache data to be sent is deleted.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
GPRS Sending	@@E27,353358017784062,F09,1*CA\r\n
GPRS Reply	\$\$E28,353358017784062,F09,OK*FC\r\n

### 3.45 Restoring Initial Settings – F11

GPRS Sending	F11
GPRS Reply	F11,OK
Description	This command is used to restore initial settings except the SMS password.
Applicable Model	TC68L/TC68SL/TS299L
<b>Example</b>	
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](mailto:info@meitrack.com).