

# **MEITRACK GPRS Protocol**

Applicable Model: MT90/MVT100/MVT340/T355/
MVT380/MVT800/MVT600/T1/T3/
T333/TC68S/T322X/T311



# **Change History**

| File Name  | MEITRACK GPRS Protocol      | Created By    | Kyle Lv                |
|------------|-----------------------------|---------------|------------------------|
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# Contents

| 1 ( | Command Format   | 5 -  |
|-----|--|------|
|     | 1.1 GPRS Command Format  | 5 -  |
|     | 1.2 Tracker Command Format   | 5 -  |
|     | 1.3 Event Code   | 9 -  |
| 2 ( | Command List   | 11 - |
| 3 ( | Command Details  | 12 - |
|     | 3.1 Real-Time Location Query (GPRS) – A10                                | 12 - |
|     | 3.2 Setting a Heartbeat Packet Reporting Interval (GPRS) – A11           | 13 - |
|     | 3.3 Tracking by Time Interval (GPRS) – A12                               | 13 - |
|     | 3.4 Setting the Cornering Report Function (GPRS) – A13                   | 14 - |
|     | 3.5 Tracking by Distance – A14   | 14 - |
|     | 3.6 Setting the Parking Scheduled Tracking Function (GPRS) – A15         | 14 - |
|     | 3.7 Enabling the Parking Scheduled Tracking Function (GPRS) – A16        | 15 - |
|     | 3.8 Controlling Output 1 Status by RFID (MVT600/T1) – A17                | 16 - |
|     | 3.9 3D-Shake Wake Up (MT90) – A19  | 16 - |
|     | 3.10 Setting GPRS Parameters – A21                                       | 16 - |
|     | 3.11 Setting the DNS Server IP Address – A22                             | 17 - |
|     | 3.12 Setting the Standby GPRS Server – A23                               | 17 - |
|     | 3.13 Reading All Authorized Phone Numbers – A70                          | 17 - |
|     | 3.14 Setting Authorized Phone Numbers – A71                              | 18 - |
|     | 3.15 Setting Listen-in Phone Numbers – A72                               | 18 - |
|     | 3.16 Setting the Smart Sleep Mode – A73                                  | 18 - |
|     | 3.17 Automatic Event Report – AAA  | 19 - |
|     | 3.18 Deleting a GPRS Event in the Buffer – AFF                           | 20 - |
|     | 3.19 Setting a Geo-Fence – B05   | 20 - |
|     | 3.20 Deleting a Geo-Fence – B06  | 21 - |
|     | 3.21 Setting the Speeding Alarm Function – B07                           | 21 - |
|     | 3.22 Setting the Towing Alarm Function – B08                             | 21 - |
|     | 3.23 Setting the Anti-Theft Function – B21                               | 22 - |
|     | 3.24 Turning off the LED Indicator – B31                                 | 22 - |
|     | 3.25 Setting a Log Interval – B34  | 23 - |
|     | 3.26 Setting the SMS Time Zone – B35                                     | 23 - |
|     | 3.27 Setting the GPRS Time Zone – B36                                    | 23 - |
|     | 3.28 Checking the Engine First to Determine Tracker Running Status – B60 | 24 - |
|     | 3.29 Setting SMS Event Characters – B91                                  | 24 - |
|     | 3.30 Setting a GPRS Event Flag – B92                                     | 24 - |
|     | 3.31 Reading a GPRS Event Flag – B93                                     | 25 - |
|     | 3.32 Setting a Photographing Event Flag (MVT600/T1/T333/T3) – B96        | 25 - |
|     | 3.33 Reading a Photographing Event Flag (MVT600/T1/T333) – B97           | 25 - |
|     | 3.34 Setting Event Authorization – B99                                   | 25 - |
|     | 3.35 Output Control – C01  | 26 - |
|     | 3.36 Notifying the Tracker of Sending an SMS – CO2                       | 27 - |



| 3.37 Setting a GPRS Event Transmission Mode – CU3  | - 27 - |
|--|--------|
| 3.38 GPRS Information Display (LCD Display) – C13  | - 28 - |
| 3.39 Registering a Temperature Sensor Number (MVT600/T1/T333/T3/MVT800) – C40                                  | - 28 - |
| 3.40 Deleting a Registered Temperature Sensor (MVT600/T1/T333/MVT800/T3) – C41                                 | - 29 - |
| 3.41 Reading the Temperature Sensor SN and Number (MVT600/T1/T333/MVT800/T3) – C42                             | - 29 - |
| 3.42 Setting a Temperature Value for the High/Low Temperature Alarm and Logical Name (MVT600/T1/T333/MVT800/T3 | 3) —   |
| C43  | - 29 - |
| 3.43 Reading Temperature Sensor Parameters (MVT600/T1/ T333/MVT800/T3) – C44                                   | - 30 - |
| 3.44 Checking Temperature Sensor Parameters (MVT600/T1/T333/MVT800/T3) – C46                                   | - 31 - |
| 3.45 Setting Fuel Parameters (MVT600/T1/T333/MVT800/T3) – C47  | - 31 - |
| 3.46 Reading Fuel Parameters (MVT600/T1/T333/MVT800/T3) – C48  | - 32 - |
| 3.47 Setting a Fuel Theft Alarm (T1/MVT600/MVT800/T333) – C49  | - 32 - |
| 3.48 Obtaining a Picture (MVT600/T1/T333/T3) – D00   | - 32 - |
| 3.49 Obtaining the Picture List (MVT600/T1/T333/T3) – D01  | - 33 - |
| 3.50 Deleting a Picture (MVT600/T1/T333/T3) – D02  | - 34 - |
| 3.51 Taking Photos on Demand (MVT600/T1/T333/T3) – D03   | - 34 - |
| 3.52 Authorizing an RFID Card (MVT600/T1/T333/T3) – D10  | - 34 - |
| 3.53 Authorizing RFID Cards in Batches (MVT600/T1/T333/T3) – D11   | - 34 - |
| 3.54 Checking RFID Authorization (MVT600/T1/T333/T3) – D12   | - 35 - |
| 3.55 Reading an Authorized RFID (MVT600/T1/T333/T3) – D13  | - 35 - |
| 3.56 Deleting an Authorized RFID Card (MVT600/T1/T333/T3) – D14  | - 35 - |
| 3.57 Deleting Authorized RFID Cards in Batches (MVT600/T1/T333/T3) – D15                                       | - 36 - |
| 3.58 Checking the Checksum of the Authorized RFID Database (MVT600/T1/T333/T3) – D16                           | - 36 - |
| 3.59 Setting the Maintenance Mileage (TC68S) – D65   | - 36 - |
| 3.60 Setting Maintenance Time (TC68S) – D66  |        |
| 3.61 Reading Device's Firmware Version and SN – E91  |        |
| 3.62 Restarting the GSM Module – F01   |        |
| 3.63 Restarting the GPS Module – F02   |        |
| 3.64 Setting the Mileage and Run Time – F08  | - 38 - |
| 3.65 Deleting SMS/GPRS Cache Data – F09  | - 38 - |
| 3.66 Restoring Initial Settings – F11  | - 39 - |



#### 1 Command Format

#### 1.1 GPRS Command Format

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

#### 1.2 Tracker Command Format

\$\$<Data identifier><Data length>,<IMEI>,<Command type>,<Event code>,<(-)Latitude>,<(-)Longitude>,<Date and time>,<Positioning status>,<Number of satellites>,<GSM signal strength>,<Speed>,<Direction>,<Horizontal dilution of precision (HDOP)>,<Altitude>,<Mileage>,<Run time>,<Base station info>,<I/O port status>,<Analog input value>,<RFID>/<Picture name>/<Geo-fence number>/<Temperature sensor No./<Assisted event info>,<Customized data>,<Protocol version>,<Fuel percentage>,<Temperature sensor 1 value|Temperature sensor 2 value|......Temperature sensor n value><\*Checksum>\r\n Note:

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

Descriptions about GPRS packets from the tracker are as follows:

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



|                      | Miles and the Angelog Angelog and the Angelog | -23.256438 (indicates      |  |
|----------------------|---|----------------------------|--|
|                      | 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.  |                            |  |
| Longitude            | Unit: degree  | 114.752146 (indicates      |  |
| (-)xxx.dddddd        | Decimal   | 114.752146°E)              |  |
|                      | When a minus (-) exists, the tracker is in the western hemisphere.  | -114.821453 (indicates     |  |
|                      | When no minus (-) exists, the tracker is in the eastern hemisphere.   | 114.821453°W)              |  |
|                      | xxx indicates the degree.   |                            |  |
|                      | dddddd indicates the decimal part.  |                            |  |
| Date and time        | yy indicates year.  | 091221102631               |  |
| yymmddHHMMSS         | mm indicates month.   | Indicates 21 December      |  |
|                      | dd indicates day.   | 2009, 10:26:31 am.         |  |
|                      | HH indicates hour.  |                            |  |
|                      | MM indicates minute.  |                            |  |
|                      | SS indicates second.  |                            |  |
|                      | Decimal   |                            |  |
| Positioning status   | Indicates the GPS signal status.  | А                          |  |
|                      | A = Valid   | The GPS is valid.          |  |
|                      | <b>V</b> = Invalid  |                            |  |
| Number of satellites | Indicates the number of received GPS satellites.  | 5                          |  |
|                      | Decimal   | Five GPS satellites are    |  |
|                      |   | received.                  |  |
| GSM signal strength  | Value: 0–31   | 12                         |  |
|                      | Decimal   | The signal strength is 12. |  |
| Speed                | Unit: km/h  | 58                         |  |
| •                    | Decimal   | The speed is 58 km/h.      |  |
| Direction            | Indicates the driving direction. The unit is degree. When the value   | 45: indicates that the     |  |
|                      | is <b>0</b> , the direction is north. The value ranges from 0 to 359.   | location is at northeast.  |  |
|                      | Decimal   | 90: indicates that the     |  |
|                      | Sconnar   | location is at east.       |  |
| HDOP                 | The value ranges from 0.5 to 99.9. The smaller the value is, the  | 5                          |  |
| 11001                | more the accuracy is.   | The HDOP is 5.             |  |
|                      | Decimal Decimal   | THE HEOT IS S.             |  |
|                      | When the accuracy value is <b>0</b> , the signal is invalid.  |                            |  |
|                      | 0.5–1: Perfect  |                            |  |
|                      | 2–3: Wonderful  |                            |  |
|                      | 4–6: Good   |                            |  |
|                      | 7–8: Medium   |                            |  |
|                      |   |                            |  |
|                      | 9–20: Below average   |                            |  |
| ۵ اله نام ۱          | 21–99.9: Poor   | 110                        |  |
| Altitude             | Unit: meter   | 118                        |  |
|                      | Decimal   |                            |  |



| Mileage            | Unit: meter  | 564870                 |
|--------------------|--|------------------------|
| · ·                | Decimal  |                        |
|                    | Indicates the total mileage. The maximum value is 4294967295. If   |                        |
|                    | the value exceeds the maximum value, it will be automatically      |                        |
|                    | cleared.   |                        |
| Run time           | Unit: second   | 2546321                |
|                    | Decimal  |                        |
|                    | Indicates the total time. The maximum value is 4294967295. If the  |                        |
|                    | value exceeds the maximum value, it will be automatically cleared. |                        |
| Base station info  | The base station information includes:                             | 460 0 E166 A08B        |
|                    | 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.                 |                        |
| I/O port status    | Hexadecimal  | 0421 (hexadecimal) =   |
|                    | Status values of eight input ports and eight output ports:         | 0000 0100 0010 0001    |
|                    | Bit0 to Bit7 corresponds to status of output ports 1 to 8.         |                        |
|                    | Bit8 to Bit15 corresponds to status of input ports 1 to 8.         |                        |
| Analog input value | Separated by " ".  | 123 456 235 1456 222   |
|                    | Hexadecimal  | (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                    |                        |
|                    | T322X/T333/T355: AD/100  |                        |
|                    | Voltage formula of battery analog (AD4):                           |                        |
|                    | MVT340/MVT380: (AD4 x 3 x 2)/1024                                  |                        |
|                    | MT90/T1/T3/MVT100/MVT600/MVT800/TC68S: (AD4 x 3.3 x                |                        |
|                    | 2)/4096  |                        |
|                    | T311/T322X/T333/T355: AD4/100                                      |                        |
|                    | Voltage formula of external power supply (AD5):                    |                        |
|                    | MVT340/MVT380: (AD5 x 3 x 16)/1024                                 |                        |
|                    | T1/T3/MVT100/MVT600/MVT800/TC68S: (AD5 x 3.3 x 16)/4096            |                        |
|                    | T311/T322X/T333/T355: AD5/100                                      |                        |
| Assisted Geo-fence | 32-bit unsigned  | 02 00 00 00 (indicates |
| event info number  | Only available by GPRS event code 20 or 21.                        | geo-fence 2)           |
| Time spent o       | 32-bit unsigned  | E0 04 00 00 (indicates |
| this trip          | Unit: second   | 1248 seconds)          |
|                    | Indicates the driving duration between engine start and engine     |                        |
|                    | stop.  |                        |
|                    | Value: 0–4294967295  |                        |
|                    | Only available by GPRS event code 145.                             |                        |



|                          | Vehicle theft  | 32-bit unsigned   | 01 00 00 00                |
|--------------------------|----------------|---|----------------------------|
|                          | trigger source | Trigger code of a vehicle theft event                                       |                            |
|                          |                | Flag generated by event 58  |                            |
| Average                  |                | 32-bit unsigned   | 7B 00 00 00 (indicates     |
|                          | driving speed  | Unit: km/h  | 123 km/h)                  |
|                          |                | Average driving speed = Mileage of a trip/Time                              |                            |
|                          |                | Only available by GPRS event code 145.                                      |                            |
|                          | Max speed per  | 32-bit unsigned   | C9 00 00 00 (indicates the |
|                          | hour           | Unit: km/h  | 201 km/h)                  |
|                          |                | Only available by GPRS event code 145.                                      |                            |
|                          | Mileage of a   | 32-bit unsigned   | 66 1F B8 F2 (indicates     |
|                          | trip           | Unit: meter   | 4072152934m)               |
|                          |                | When data contains FF, the mileage of a trip does not exist.                |                            |
|                          |                | Only available by GPRS event code 145.                                      |                            |
| RFID                     |                | Indicates the IC card identity code.  | 42770680 (hexadecimal)     |
|                          |                | Hexadecimal   |                            |
|                          |                | Only available by GPRS event code 37.                                       |                            |
| Picture nam              | e              | Only available by GPRS event code 39.                                       | 0918101221_C2E03           |
| Temperatur               | e sensor No.   | The temperature sensor No. is set by command C40.                           | 08 (indicates temperature  |
|                          |                | Contains 2 hexadecimal characters.  | sensor 8)                  |
|                          |                | Note: The number is only available by event code 50 or 51.                  |                            |
| Customized               | data           | Reserved  |                            |
|                          |                | A separator still exists.   |                            |
| Protocol ver             | rsion          | Decimal   | 1                          |
|                          |                | 1–50: Used for all common Meitrack protocols.                               |                            |
|                          |                | 50–99: Used for OBD.  |                            |
|                          |                | When the protocol is compatible with the old tracker, the value is          |                            |
|                          |                | empty or is 0 by default.   |                            |
| Fuel percent             | tage           | Contains 4 hexadecimal characters. A high byte indicates the                | 241E (indicates the fuel   |
|                          |                | integer bit of the percentage. A low byte indicates the decimal of          | percentage is 36.30%.)     |
|                          |                | the percentage.   |                            |
|                          |                | When the fuel sensor type is <b>0</b> , the sensor is not connected and the |                            |
|                          |                | value is empty.   |                            |
| Temperature sensor No. + |                | Contains 6 hexadecimal characters.  | 011A09 021A15 061E20       |
| Temperature value        |                | The first two characters indicate the sensor No.                            | There are 3 temperature    |
|                          |                | The two characters in the middle are the integer part of                    | sensors.                   |
|                          |                | temperature (-127°C to +127°C).   | Temperature sensor 1:      |
|                          |                | The lowest two characters are the decimal part of temperature.              | 26.09°C                    |
|                          |                |   | Temperature sensor 2:      |
|                          |                |   | 26.21°C                    |
|                          |                |   | Temperature sensor 6:      |
|                          |                |   | 30.32°C                    |
| *                        |                | Separates commands from checksums.  | *                          |



|          | 1 byte and ASCII (Hexadecimal is represented as 0x2A)   |      |
|----------|---|------|
| Checksum | 2 bytes. The parameter indicates the sum of all data (excluding the   | BE   |
|          | checksum and ending mark). It is a hexadecimal character.   |      |
|          | Example: \$\$ <data identifier=""><data length="">,<imei>,<command< td=""><td></td></command<></imei></data></data> |      |
|          | type>, <command/> <*Checksum>\r\n   |      |
| \r\n     | 2 bytes. The parameter is an ending character. The type is ASCII.   | \r\n |
|          | (Hexadecimal value: 0x0d 0x0a)  |      |

#### 1.3 Event Code

| <b>Event Code</b> | Event                | Default SMS Header (At Most 16 Bytes)           |  |
|-------------------|----------------------|---|--|
| 1                 | SOS Pressed          | sos   |  |
| 2                 | Input 2 Active       | Ignition On: MVT100&MVT340&T322X                |  |
|                   |                      | Door Open: MVT380&MVT600&T1&MVT800&T333&T3      |  |
|                   |                      | In2 Active: Other models                        |  |
| 3                 | Input 3 Active       | Ignition On: MVT600&T1&T333 &T3                 |  |
|                   |                      | Door Open: MVT800&T322X                         |  |
|                   |                      | In3 Active: other models                        |  |
| 4                 | Input 4 Active       | Ignition On: MVT380&MVT800                      |  |
|                   |                      | In4 Active: other models                        |  |
| 5                 | Input 5 Active       | In5 Active                                      |  |
| 9                 | Input 1 Inactive     | In1 Inactive                                    |  |
| 10                | Input 2 Inactive     | Ignition Off: MVT100&MVT340&T322X               |  |
|                   |                      | Door Close: MVT380&MVT600&T1&MVT800&T333&T3     |  |
|                   |                      | In2 Inactive: other models                      |  |
| 11                | Input 3 Inactive     | Ignition Off: MVT600&T1&T333&T3                 |  |
|                   |                      | Door Close: MVT800&T322X                        |  |
|                   |                      | In3 Inactive: other models                      |  |
| 12                | Input 4 Inactive     | Ignition Off: MVT380&MVT800                     |  |
|                   |                      | In4 Inactive: other models                      |  |
| 13                | Input 5 Inactive     | In5 Inactive: other models                      |  |
| 17                | Low Battery          | Low Battery                                     |  |
| 18                | Low External Battery | Low Ext-Battery                                 |  |
| 19                | Speeding             | Speeding  |  |
| 20                | Enter Geo-fence      | Enter Fence N (N means the number of the fence) |  |
| 21                | Exit Geo-fence       | Exit Fence N (N means the number of the fence)  |  |
| 22                | External Battery On  | Ext-Battery On                                  |  |
|                   |                      | Tracker connected: TC68S                        |  |
| 23                | External Battery Cut | Ext-Battery Cut                                 |  |
|                   |                      | Tracker removed: TC68S                          |  |
| 24                | GPS Signal Lost      | GPS Signal Lost                                 |  |
| 25                | GPS Signal Recovery  | GPS Recovery                                    |  |



| 26  | Enter Sleep                  | Enter Sleep     |
|-----|------------------------------|-----------------|
| 27  | Exit Sleep                   | Exit Sleep      |
| 28  | GPS Antenna Cut              | GPS Antenna Cut |
| 29  | Device Reboot                | Power On        |
| 31  | Heartbeat                    | 1               |
| 32  | Cornering                    | Cornering       |
| 33  | Track By Distance            | Distance        |
| 34  | Reply Current (Passive)      | Now             |
| 35  | Track By Time Interval       | Interval        |
| 36  | Tow                          | Tow             |
| 37  | RFID                         | (only for GPRS) |
| 39  | Photo                        | (only for GPRS) |
| 40  | Power Off                    | Power Off       |
| 41  | Stop Moving                  | Stop moving     |
| 42  | Start Moving                 | Start Moving    |
| 44  | GSM Jamming                  | GSM Jamming     |
| 50  | Temperature High             | Temp High       |
| 51  | Temperature Low              | Temp Low        |
| 52  | Full Fuel                    | Full Fuel       |
| 53  | Low Fuel                     | Low Fuel        |
| 54  | Fuel Theft                   | Fuel Theft      |
| 56  | Armed                        | Armed           |
| 57  | Disarmed                     | Disarmed        |
| 58  | Vehicle Theft                | Vehicle Theft   |
| 63  | No GSM Jamming               | No GSM Jamming  |
| 65  | Press Input 1 (SOS) to Call  | /               |
| 66  | Press Input 2 to Call        | /               |
| 67  | Press Input 3 to Call        | /               |
| 68  | Press Input 4 to Call        | /               |
| 69  | Press Input 5 to Call        | /               |
| 70  | Reject Incoming Call         | /               |
| 71  | Get Location by Call         | /               |
| 72  | Auto Answer Incoming Call    | /               |
| 73  | Listen-in (Voice Monitoring) | /               |
| 79  | Fall                         | Fall            |
| 80  | Install                      | Install         |
| 81  | Drop Off                     | Drop Off        |
| 139 | Maintenance Notice           | Maintenance     |



## **2 Command List**

| Command | Command Description                                  | Applicable Model                     |
|---------|--|--------------------------------------|
| A10     | Real-Time Location Query (GPRS)                      | All                                  |
| A11     | Setting a Heartbeat Packet Reporting Interval (GPRS) | All                                  |
| A12     | Tracking by Time Interval (GPRS)                     | All                                  |
| A13     | Setting the Cornering Report Function (GPRS)         | All                                  |
| A14     | Tracking by Distance                                 | All                                  |
| A15     | Setting the Parking Scheduled Tracking Function      | MVT100/MVT340/MVT380/MVT600/         |
|         | (GPRS)   | T1/MVT800/T333/T3                    |
| A16     | Enabling the Parking Scheduled Tracking Function     | MVT100/MVT340/MVT380/MVT600/         |
|         | (GPRS)   | T1/MVT800/T333/T3                    |
| A17     | Controlling Output 1 Status by RFID                  | MVT600/T1/T333/T3                    |
| A19     | 3D-Shake Wake Up                                     | MT90                                 |
| A21     | Setting GPRS Parameters                              | All                                  |
| A22     | Setting the DNS Server IP Address                    | All (excluding T322X/T355)           |
| A23     | Setting the Standby GPRS Server                      | All (excluding T322X)                |
| A70     | Reading All Authorized Phone Numbers                 | All                                  |
| A71     | Setting Authorized Phone Numbers                     | All                                  |
| A72     | Setting Listen-in Phone Numbers                      | All (excluding T355/T311/MVT340)     |
| A73     | Setting the Smart Sleep Mode                         | All                                  |
| AAA     | Automatic Event Report                               | All                                  |
| AFF     | Deleting a GPRS Event in the Buffer                  | All                                  |
| B05     | Setting a Geo-Fence                                  | All                                  |
| B06     | Deleting a Geo-Fence                                 | All                                  |
| B07     | Setting the Speeding Alarm Function                  | All                                  |
| B08     | Setting the Towing Alarm Function                    | All (excluding T311/T355)            |
| B21     | Setting the Anti-Theft Function                      | MVT100/MVT340/MVT380/MVT600/         |
|         |  | T1/T68S/T333/T3/T355/T311            |
| B31     | Turning off the LED Indicator                        | All (excluding T322/T355)            |
| B34     | Setting a Log Interval                               | All (excluding T322X/MVT340/T355)    |
| B35     | Setting the SMS Time Zone                            | All                                  |
| B36     | Setting the GPRS Time Zone                           | All (excluding T355)                 |
| B60     | Checking the Engine First to Determine Tracker       | MVT100/340/380/600/T1/MVT800/T333/T3 |
|         | Running Status                                       |                                      |
| B91     | Setting SMS Event Characters                         | All                                  |
| B92     | Setting a GPRS Event Flag                            | All                                  |
| B93     | Reading a GPRS Event Flag                            | All                                  |
| B96     | Setting a Photographing Event Flag                   | MVT600/T1/T333/T3                    |
| B97     | Reading a Photographing Event Flag                   | MVT600/T1/T333/T3                    |
| B99     | Setting Event Authorization                          | All                                  |
| C01     | Output Control                                       | MVT100/340/380/600/T1/MVT800/T333/T3 |



| C02 | Notifying the Tracker of Sending an SMS      | All                       |
|-----|--|---------------------------|
| C03 | Setting a GPRS Event Transmission Mode       | All (excluding T322/T355) |
| C13 | GPRS Information Display (LCD Display)       | MVT600/T1/T333/T3         |
| C40 | Registering a Temperature Sensor Number      | T1/MVT600/MVT800/T333/T3  |
| C41 | Deleting a Registered Temperature Sensor     | T1/MVT600/MVT800/T333/T3  |
| C42 | Reading the Temperature Sensor SN and Number | T1/MVT600/MVT800/T333/T3  |
| C43 | Setting a Temperature Value for the High/Low | T1/MVT600/MVT800/T333/T3  |
|     | Temperature Alarm and Logical Name           |                           |
| C44 | Reading Temperature Sensor Parameters        | T1/MVT600/MVT800/T333/T3  |
| C46 | Checking Temperature Sensor Parameters       | T1/MVT600/MVT800/T333/T3  |
| C47 | Setting Fuel Parameters                      | T1/MVT600/MVT800/T333/T3  |
| C48 | Reading Fuel Parameters                      | T1/MVT600/MVT800/T333/T3  |
| C49 | Setting a Fuel Theft Alarm                   | T1/MVT600/MVT800/T333     |
| D00 | Obtaining a Picture                          | MVT600/T1/T333/T3         |
| D01 | Obtaining the Picture List                   | MVT600/T1/T333/T3         |
| D02 | Deleting a Picture                           | MVT600/T1/T333/T3         |
| D03 | Timely Photograghing                         | MVT600/T1/T333/T3         |
| D10 | Authorizing an RFID Card                     | MVT600/T1/T333/T3         |
| D11 | Authorizing RFID Cards in Batches            | MVT600/T1/T333/T3         |
| D12 | Checking Whether a RFID Is Authorized        | MVT600/T1/T333/T3         |
| D13 | Reading an Authorized RFID                   | MVT600/T1/T333/T3         |
| D14 | Deleting an Authorized RFID Card             | MVT600/T1/T333/T3         |
| D15 | Deleting Authorized RFID Cards in Batches    | MVT600/T1/T333/T3         |
| D16 | Checking the Checksum of the Authorized RFID | MVT600/T1/T333/T3         |
|     | Database                                     |                           |
| D65 | Setting the Maintenance Mileage              | TC68S                     |
| D66 | Setting Maintenance Time                     | TC68S                     |
| E91 | Reading Device's Firmware Version and SN     | All                       |
| F01 | Restarting the GSM Module                    | All                       |
| F02 | Restarting the GPS Module                    | All                       |
| F08 | Setting the Mileage and Run Time             | All                       |
| F09 | Deleting SMS/GPRS Cache Data                 | All                       |
| F11 | Restoring Initial Settings                   | All                       |
|     |  |                           |

#### **3 Command Details**

## 3.1 Real-Time Location Query (GPRS) – A10

| GPRS Sending | A10  |
|--------------|--|
| GPRS Reply   | AAA,34,(-)Latitude,(-)Longitude,Date and time,Positioning status,Number of   |
|              | satellites,GSM signal strength,Speed,Direction,HDOP,Altitude,Mileage,Run time,Base station info,I/O port status,Analog input value |



| Description      | <b>34</b> : indicates the GPRS command event code.                             |  |
|------------------|--|--|
| Applicable Model | All  |  |
| Example          |  |  |
| GPRS Sending     | @@Q25,353358017784062,A10*6A\r\n   |  |
| GPRS Reply       | \$\$Q128,353358017784062,AAA,34,22.543176,114.078448,100313093738,A,5,22,2,205 |  |
|                  | ,5,-14,0,60,0 0 10133 4110,0000,149 153 173 2707 914,*91\r\n                   |  |

#### 3.2 Setting a Heartbeat Packet Reporting Interval (GPRS) – A11

| GPRS Sending     | A11,Interval   |  |
|------------------|--|--|
| GPRS Reply       | A11,0K   |  |
| Description      | The heartbeat packet function is used to keep the Transmission Control Protocol (TCP) connection open when the interval of scheduled GPRS reporting is long.  Interval = 0: function disabled (default).  Interval = [165535]: function enabled. Unit: minute.  The heartbeat function is available only in conjunction with deep sleep mode. When the |  |
|                  | device enters deep sleep mode, heartbeat reports will be sent at the specified interval.  A heartbeat report is to confirm the device is online, but positioning data is invalid.  |  |
| Applicable Model | All  |  |
| Example          |  |  |
| GPRS Sending     | @@S28,353358017784062,A11,10*FD\r\n  |  |
| GPRS Reply       | \$\$\$28,353358017784062,A11,OK*FE\r\n  After the above command is run successfully, the tracker will send the following GPRS heartbeat packet to the platform every 10 minutes in sleep mode: \$\$a131,353358017784062,AAA,31,22.913458,114.083183,080229123628,V,9,23,21,83, 1,18,1350,127,0 0 10133 4110,0000,169 181 184 2714 919,*60              |  |

## 3.3 Tracking by Time Interval (GPRS) – A12

| GPRS Sending     | A12,Interval  |
|------------------|---|
| GPRS Reply       | A12,0K  |
| Description      | Unit: x10 seconds   |
|                  | Interval = 0: function disabled.  |
|                  | The maximum time 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 Reply       | \$\$V28,353358017784062,A12,OK*02\r\n   |
|                  | After the above command is run successfully, the tracker will send the following GPRS |
|                  | data packet to the platform every 1 minute:   |
|                  | \$\$W129,353358017784062,AAA,35,22.540113,114.076141,100313094354,A,5,22,1,17         |
|                  | 4,4,129,0,435,0 0 10133 4110,0000,166 224 193 2704 916,*BE\r\n                        |



#### 3.4 Setting the Cornering Report Function (GPRS) - A13

| GPRS Sending     | A13,Angle  |
|------------------|--|
| GPRS Reply       | A13,0K   |
| Description      | When the driving angle exceeds the preset value, the tracker will send a GPRS data packet with location information to the server, which ensures a smoother route on the platform.  Angle = 0: function disabled (default).  Angle = [1359]: function enabled. Recommended value: 30.  |
| Applicable Model | All  |
| Example          |  |
| GPRS Sending     | @@X29,353358017784062,A13,120*37\r\n   |
| GPRS Reply       | \$\$X28,353358017784062,A13,OK*05\r\n  After the above command is run successfully, if the cornering angle is greater than 120 degree, the tracker will send the following GPRS data pakcet to the server:  \$\$Y129,353358017784062,AAA,32,22.540968,114.077455,100313094534,A,4,22,1,166, 3,175,0,534,0 0 10133 4110,0000,141 138 159 2691 904,*D9\r\n |

# 3.5 Tracking by Distance – A14

| GPRS Sending     | A14,Distance   |  |
|------------------|--|--|
| GPRS Reply       | A14,OK   |  |
| Description      | Distance = 0: function disabled (default).  Distance = [165535]: function enabled. Unit: meter.  Note: When both the GPRS time interval and distance tracking functions are enabled, the "first reach first report" rule will be applied. For example, set the time interval to 6 x 10 seconds and distance to 200 meters. If the road is clear, a distance data packet will be reported first; if there is heavy traffic on the road, a time interval data packet will be reported first. Then both the time interval and distance counters will be reset to 0. |  |
|                  | <b>300</b> is recommended.   |  |
| Applicable Model | All  |  |
| Example          |  |  |
| GPRS Sending     | @@D30,353358017784062,A14,1000*4A\r\n  |  |
| GPRS Reply       | \$\$D28,353358017784062,A14,OK*F2\r\n  After the above command is run successfully, if the driving distance reaches 1000m, the tracker will send a data packet to the server.  \$\$D131,353358017784062,AAA,33,22.547271,114.047405,080310080929,A,8,21,13,89  ,1,12,8525,561,0 0 10133 4110,0000,163 185 186 2712 939,*31\r\n   |  |

#### 3.6 Setting the Parking Scheduled Tracking Function (GPRS) - 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 is automatically enabled. For details       |
|                  | about engine status, see section 3.7 "Enabling the Parking Scheduled Tracking Function      |
|                  | (GPRS) – A16."  |
|                  | Interval unit: x10 seconds  |
|                  | Interval = 0: function disabled.  |
|                  | The maximum interval is 65535 x 10 seconds.   |
|                  | Note: If data needs to be sent at the specified interval after the vehicle starts or stops, |
|                  | the function needs to work with the A12 function.   |
| Applicable Model | MVT100/MVT340/MVT380/MVT600/T1/MVT800/TC68S/T333/T3   |
| Example          |   |
| 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 (GPRS) – A16

| GPRS Sending     | A16,Status   |  |                              |
|------------------|--|--|------------------------------|
| GPRS Reply       | A16,OK   |  |                              |
| Description      | level) of a vehicle  | able for vehicle trackers only. Th<br>tracker must connect to engi<br>able. The first positive input p | ne detection. Otherwise, the |
|                  | Vehicle Tracker  | First Positive Input Port  |                              |
|                  | MVT100   | Input port 2   |                              |
|                  | MVT340   | Input port 2   |                              |
|                  | MVT380   | Input port 4   |                              |
|                  | MVT600   | Input port 3   |                              |
|                  | T1/T333/T3   | Input port 3   |                              |
|                  | When the activation status is <b>1</b> , the parking scheduled tracking function is enabled; when the activation status is <b>0</b> , the function is disabled. GPRS data is sent at 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 TC68S can determine whether the engine is activated based on vehicle battery voltage. |  |                              |
| Applicable Model | MVT100/MVT340/M  | IVT380/MVT600/T1/MVT800/TC6  | 8S/T333/T3                   |
| Example          |  |  |                              |
| GPRS Sending     | @@F27,353358017784062,A16,0*C3\r\n   |  |                              |
| GPRS Reply       | \$\$F28,35335801778  | 4062,A16,OK*F6\r\n   |                              |



#### 3.8 Controlling Output 1 Status by RFID (MVT600/T1) - A17

| GPRS Sending     | A17,X   |
|------------------|---|
| GPRS Reply       | A17,0K  |
| Description      | <ul> <li>X = 1: function enabled. Before using the function, you must ensure: 1. ACC detection is connected to input 3; 2. A RFID card has been authorized.</li> <li>X = 0: function disabled (default).</li> <li>For example: After swiping the authorized RFID card, you must start the engine within 1 minute. If the time exceeds 1 minute, you need to swipe the card again. After the engine is started, input 3 has been detecting the ACC status. If ACC ON is detected (that is, input 3 is the high level), output 1 will not generate data. If ACC OFF is detected, after 1 minute, swipe the authorized RFID card to start the engine as required.</li> <li>For details about how to authorize a RFID, see commands D10–D15.</li> </ul> |
| Applicable Model | MVT600/T1/T333/T3   |
| Example          |   |
| GPRS Sending     | @@T27,353358017784062,A17,1*D3\r\n  |
| GPRS Reply       | \$\$T28,353358017784062,A17,OK*05\r\n   |

## 3.9 3D-Shake Wake Up (MT90) - A19

| GPRS Sending     | A19,X   |
|------------------|---|
| GPRS Reply       | A19,OK  |
| Description      | When wakeup is not required in the sleep mode, <i>X</i> is set to <b>0</b> .  When vibration and wakeup are required in the deep sleep mode, <i>X</i> is set to <b>1</b> (default value). |
| Applicable Model | MT90  |
| Example          |   |
| GPRS Sending     | @@H27,353358017784062,A19,1*C9\r\n  |
| GPRS Reply       | \$\$H28,353358017784062,A19,OK*F8\r\n   |

#### 3.10 Setting GPRS Parameters – A21

| GPRS Sending     | A21,Connection mode,IP address,Port,APN,APN user name,APN password          |
|------------------|---|
| GPRS Reply       | A21,OK  |
| Description      | Connection mode = 0: function disabled.                                     |
|                  | Connection mode = 1: function enabled; use TCP/IP reporting mode.           |
|                  | Connection mode = 2: function enabled; use UDP reporting mode.              |
|                  | IP address: IP address or domain name. A maximum of 32 bytes are supported. |
|                  | Port: a maximum of 5 digits.  |
|                  | APN/APN user name/APN password: a maximum of 32 bytes respectively.         |
|                  | If no user name and password are required, leave them blank.                |
| Applicable Model | All   |
| Example          |   |



| GPRS Sending | @@H48,353358017784062,A21,1,67.203.13.26,8800,,,*C9 |
|--------------|---|
| GPRS Reply   | \$\$H28,353358017784062,A21,OK*F4\r\n               |

#### 3.11 Setting the DNS Server IP Address - A22

| GPRS Sending     | A22,DNS server IP address  |  |
|------------------|--|--|
| GPRS Reply       | 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 | Excluding T322X/T355   |  |
| Example          |  |  |
| GPRS Sending     | @@K38,353358017784062,A22,75.127.67.90*FD\r\n  |  |
| GPRS Reply       | \$\$K28,353358017784062,A22,OK*F8\r\n  |  |

#### **3.12 Setting the Standby GPRS Server – A23**

| GPRS Sending     | A23,IP address,Port   |
|------------------|---|
| GPRS Reply       | A23,OK  |
| Description      | IP address: a maximum of 32 bytes  Port: a maximum of 5 digits  When the tracker fails to send data to the active server set by command A21, data is automatically sent to the standby server to prevent data loss. |
| Applicable Model | Excluding T322X   |
| Example          |   |
| GPRS Sending     | @@\$43,353358017784062,A23,67.203.13.26,8800*F0   |
| GPRS Reply       | \$\$\$28,353358017784062,A23,OK*01\r\n  |

#### 3.13 Reading All Authorized Phone Numbers – A70

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



# 3.14 Setting Authorized Phone Numbers – A71

| GPRS Sending     | A71,Phone number 1,Phone number 2,Phone number 3  |
|------------------|---|
| GPRS Reply       | A71,OK  |
| Description      | Phone number: A phone number has a maximum of 16 bytes. If no phone numbers are set, leave them blank. Phone numbers are empty by default.  Phone number 1: SOS phone number. When you call the tracker by using the phone number, you will receive SMS notification about the location, geo-fence alarm and low power alarm.  When the SOS button is pressed, the tracker will dial phone numbers 1, 2, and 3 in sequence. The tracker stops dialing when a phone number responds. |
| Applicable Model | All   |
| Example          |   |
| GPRS Sending     | @@U61,353358017784062,A71,13811111111,13822222222,138333333333*7D\r\n   |
| GPRS Reply       | \$\$U28,353358017784062,A71,OK*06\r\n   |

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

| GPRS Sending     | A72,Listen-in phone number 1,Listen-in phone number 2   |
|------------------|---|
| GPRS Reply       | A72,OK  |
| Description      | When you call the tracker by using authorized listen-in phone numbers, the tracker will answer the call automatically and enter the listen-in state. In this way, the tracker will not make any sound.  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.  If no phone numbers are set and commas are remained, phone numbers set before will be deleted. |
| Applicable Model | Excluding T322X/T355/MVT340   |
| Example          |   |
| GPRS Sending     | @@V49,353358017784062,A72,13844444444,13855555555*55\r\n  |
| GPRS Reply       | \$\$V28,353358017784062,A72,OK*08\r\n   |

## 3.16 Setting the Smart Sleep Mode – A73

| GPRS Sending | A73,Sleep level  |
|--------------|--|
| GPRS Reply   | A73,OK   |
| Description  | Set the automatic smart sleep mode when the tracker is idle.                         |
|              | Sleep level = 0: function disabled (default).  |
|              | Sleep level = 1: normal sleep. The GSM module always works, and the GPS module       |
|              | occasionally enters the sleep mode. The tracker works 25% longer in the normal sleep |
|              | mode than that in the normal working mode. This mode is not recommended for short    |
|              | interval tracking; this will affect the route precision.                             |



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 sleep mode. Once an event is triggered, the GPS and GSM modules will be woken up. A heartbeat event will be triggered only in the deep sleep mode, which will be uploaded every one hour by default.

Triggering events 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 receiving, call, and heartbeat event (The GPS is disabled during heartbeat wakeup.).

#### Note:

- T355 is in deep sleep mode by default. If no event (drop/incoming call/SMS/vibration) is triggered after five minutes, the tracker will enter deep sleep mode. In this way, a triggering event (drop/incoming call/SMS/vibration) can wake the device up, and then the device will enter working mode. In deep sleep mode, if no event (drop/incoming call/SMS/vibration) is triggered within 25 minutes, the device will automatically enter super power-saving mode. In this mode, only a drop or vibration event can wake the device up. GPS and GSM modules can be enabled intelligently based on vehicle driving status, which saves power.
- The MT90 can enter sleep mode under vibration, and vibration cannot wake the MT90 up from sleep mode. If the A19 command is enabled, the MT90 can be woken up. By default, MT90 cannot be woken up by vibration.
- 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 Reply       | \$\$W28.353358017784062.A73.OK*0A\r\n |

#### 3.17 Automatic Event Report - AAA

| GPRS Event Report | AAA,Command type,(-)Latitude,(-)Longitude,Date and time,Positioning status,Number of satellites,GSM signal strength,Speed,Direction,HDOP,Altitude,Mileage,Run time,Base station info,I/O port status,Analog input value |  |
|-------------------|---|--|
| Description       | When an event occurs, the tracker automatically reports the event to the server.  |  |
| Applicable Model  | Excluding T322X   |  |
| Example           |   |  |
| GPRS Reply        | When you press the SOS button, the tracker will send the following information to the server: \$\$G127,353358017784062,AAA,1,22.538169,114.075958,100313095653,A,3,21,4,46,5,   |  |
|                   | 581,0,148,0 0 10133 4172,0000,166 204 205 2709 878,*77\r\n  |  |



#### 3.18 Deleting a GPRS Event in the Buffer – AFF

| GPRS Sending     | AFF,Number of deleted GPRS events  |  |
|------------------|--|--|
| GPRS Reply       | Use the AFF command to clear the existing data when the GPRS connection mode is UDP.  AFF, Number of remaining cache, Command type, (-) Latitude, (-) Longitude, Data and time, Positioning status, Number of satellites, GSM signal strength, Speed, Direction, HDOP, Altitude, Mileage, Run time, Base station info, I/O port status, Analog input value |  |
| Description      | Number of deleted GPRS events: hexadecimal. In general, the number is 1.  Number of remaining cache: indicates the number of events in the buffer; hexadecimal.  |  |
| Applicable Model | Excluding T322X  |  |
| Example          |  |  |
| GPRS Sending     | @@h27,353358017784062,AFF,1*0B\r\n   |  |
| GPRS Reply       | \$\$h28,353358017784062,AFF,OK*3D\r\n  |  |

## 3.19 Setting a Geo-Fence – B05

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



#### 3.20 Deleting a Geo-Fence – B06

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

#### 3.21 Setting the Speeding Alarm Function – B07

| GPRS Sending     | B07,Driving speed  |
|------------------|--|
| GPRS Reply       | B07,OK   |
| Description      | Driving speed = 0: function disabled (default).  Driving speed = [1255]: function enabled. Unit: km/h. When the driving speed reaches the preset value, a speeding alarm will be generated.  |
| Applicable Model | All  |
| Example          |  |
| GPRS Sending     | @@P28,353358017784062,B07,60*05\r\n  |
| GPRS Reply       | \$\$P28,353358017784062,B07,OK*01\r\n When the tracker driving speed reaches 60 km/h, it will send the following information to the server: \$\$k134,353358017784062,AAA,19,22.916675,114.088813,080229123718,A,10,22,61,31 ,1,21, 6635,395,460 0 10133 4110,0000,164 185 181 2712 915,*F7\r\n |

#### 3.22 Setting the Towing Alarm Function – B08

| GPRS Sending     | B08,Vibration duration   |
|------------------|--|
| GPRS Reply       | B08,OK   |
| Description      | When the tracker's vibration duration exceeds the preset value, the tracker will send an alarm to an authorized phone number or the server. Before using the towing alarm 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 duration. Otherwise, the towing alarm function is unavailable.  Vibration duration = 0: function disabled (default).  Vibration duration = [1255]: function enabled. Unit: second. |
| Applicable Model | Excluding T322X/T355   |
| Example          |  |
| GPRS Sending     | @@I27,353358017784062,B08,3*CB\r\n   |



| GPRS Reply | \$\$128,353358017784062,B08,OK*FB\r\n   |
|------------|---|
|            | When the tracker vibrates for more than consecutive 3 seconds, it will send the following |
|            | information to the server:  |
|            | \$\$K133,353358017784062,AAA,36,22.916675,114.088813,080229123718,A,10,22,61,3            |
|            | 1,1,21,6635,395,460 0 1013 4110,0000,164 185 181 2712 915,*A2                             |

## 3.23 Setting the Anti-Theft Function – B21

| GPRS Sending     | B21,Status   |                                       |                |  |
|------------------|--|---------------------------------------|----------------|--|
| GPRS Reply       | B21,OK   |                                       |                |  |
| Description      | Status = 1: function enabled (default). An alarm is generated when the first negative input and first positive input of vehicle 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 T322X is activated.  Status = 0: function disabled. No alarm is generated when the first negative input and first positive input of vehicle trackers excluding SOS are activated.  Note: The function is only available for MVT series, T1, and T322X vehicle 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/T333/T3   | Input 2                               | Input 3        |  |
|                  | MVT800   | Input 3                               | Input 4        |  |
|                  | Note: The TC68S can determine whether the engine is activated based on vehicle battery voltage.  When the T322X/MVT800 is in arming state and input 3 is triggered, a vehicle theft alarm will be generated, the buzzer makes a sound, and the tracker makes a call and sends an SMS to the authorized phone number. In this way, if T322X input 2/MVT800 input 4 is triggered, output 1 is activated and the tracker makes a call and sends an SMS to the authorized phone number.  |                                       |                |  |
| Applicable Model | MVT100/MVT340/MVT380/MVT600/T1/MVT800/T333/TC68S/T3/T311   |                                       |                |  |
| Example          |  |                                       |                |  |
| GPRS Sending     | @@C27,353358017784062,B21,1*BE\r\n   |                                       |                |  |
| GPRS Reply       | \$\$C28,3533580  | \$\$C28,353358017784062,B21,OK*F0\r\n |                |  |

#### 3.24 Turning off the LED Indicator - B31

| GPRS Sending | B31,A  |
|--------------|--|
| GPRS Reply   | B31,OK   |
| Description  | When A is <b>00</b> , the tracker's indicator is turned on (default). You can query the device's |



|                  | running status according to the indicator status.  When A is <b>10</b> , the tracker's indicator is turned off. |  |
|------------------|---|--|
| Applicable Model | Excluding T322X/T355  |  |
| Example          |   |  |
| GPRS Sending     | @@J28,353358017784062,B31,10*F7\r\n   |  |
| GPRS Reply       | \$\$J28,353358017784062,B31,OK*F8\r\n   |  |

#### 3.25 Setting a Log Interval – B34

| GPRS Sending     | B34,Log interval   |
|------------------|--|
| GPRS Reply       | B34,OK   |
| Description      | Set the interval for recording data to device's memory when the GPS signal is valid.  Recorded logs can only be read by GPSLog or Meitrack Manager software.  Log interval = 0: function disabled (default).  Log interval = [165535]: function enabled. Unit: second. |
| Applicable Model | Excluding T322X/MVT340/T355  |
| Example          |  |
| GPRS Sending     | @@N28,353358017784062,B34,60*03\r\n  |
| GPRS Reply       | \$\$N28,353358017784062,B34,OK*FF\r\n  |

## 3.26 Setting the SMS Time Zone - B35

| GPRS Sending     | B35,SMS minute  |
|------------------|---|
| GPRS Reply       | B35,OK  |
| Description      | The default time zone of the tracker is GMT 0. You can run the B35 command to change the SMS report time zone to the local time zone. The SMS report time zone is different from the GPRS data packet time zone.  When SMS minute is 0, the time zone is GMT 0.  When SMS minute is a value ranging from -32768 to 32767, set time zones. |
| Applicable Model | All   |
| Example          |   |
| GPRS Sending     | @@O29,353358017784062,B35,480*3C\r\n  |
| GPRS Reply       | \$\$028,353358017784062,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).  |

## 3.27 Setting the GPRS Time Zone - B36

| ,GPRS minute  |
|---|
| ,OK   |
| en <b>GPRS minute</b> is <b>0</b> , the time zone is <b>GMT 0</b> (default). The MS02 can automatically ect the user time zone, so that the GPRS time zone does not need to be changed. |
|   |



|                  | Otherwise, inaccurate data occurs.  When <b>GPRS minute</b> is a value ranging from -32768 to 32767, set time zones. |
|------------------|--|
| Applicable Model | Excluding T355   |
| Example          |  |
| GPRS Sending     | @@P29,353358017784062,B36,480*3E\r\n   |
| GPRS Reply       | \$\$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).   |

## 3.28 Checking the Engine First to Determine Tracker Running Status – B60

| GPRS Sending     | B60,X  |
|------------------|--|
| GPRS Reply       | B60,OK   |
| Description      | X = 0: function disabled (default).  |
|                  | X = 1: function enabled. When the device detects ACC OFF, device's longitude and |
|                  | latitude will not be updated, so as to avoid static drift.                       |
|                  | The first positive input of the tracker connects to engine detection by default. |
| Applicable Model | MVT100/MVT380/MVT600/T1/MVT800/TC68S/T333/T3                                     |
| Example          |  |
| GPRS Sending     | @@U27,353358017784062,B60,1*D3\r\n   |
| GPRS Reply       | \$\$U28,353358017784062,B60,OK*05\r\n  |

#### 3.29 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 | Excluding T322X  |
| Example          |  |
| GPRS Sending     | @@R31,353358017784062,B91,1,SOS*F0\r\n   |
| GPRS Reply       | \$\$R28,353358017784062,B91,OK*06\r\n  |
|                  | After you press the SOS button (input 1), the tracker will send an alarm SMS whose |
|                  | header is SOS to a preset authorized phone number.                                 |

#### 3.30 Setting a GPRS Event Flag - B92

| GPRS Sending | B92,GPRS event flag   |
|--------------|---|
| GPRS Reply   | B92,OK  |
| Description  | Set one or multiple GPRS event flags.                         |
|              | GPRS event flag: 16 hexadecimal strings (64 bits).            |
|              | High bit: indicates the 64 <sup>th</sup> event flag (bit 63). |
|              | Low bit: indicates 1 <sup>st</sup> event (SOS) flag (bit 0).  |



| Applicable Model | All   |
|------------------|---|
| Example          |   |
| GPRS Sending     | @@q42,353358017784062,B92,1234567890ABCDEF*62\r\n |
| GPRS Reply       | \$\$q28,353358017784062,B92,OK*26\r\n             |

#### 3.31 Reading a GPRS Event Flag - B93

| GPRS Sending     | B93   |
|------------------|---|
| GPRS Reply       | B93,GPRS event code flag                            |
| Description      | Read a GPRS event code flag.                        |
| Applicable Model | All   |
| Example          |   |
| GPRS Sending     | @@V25,353358017784062,B93*7B\r\n                    |
| GPRS Reply       | \$\$V42,353358017784062,B93,00000007E01C001F*B5\r\n |

#### 3.32 Setting a Photographing Event Flag (MVT600/T1/T333/T3) – B96

| GPRS Sending     | B96,Photographing event flag  |  |
|------------------|---|--|
| GPRS Reply       | B96,OK  |  |
| Description      | Set one or multiple photographing events. When a preset event ocuurs, a photo is taken and then saved in the Micro SD card.  By default, after you press the SOS button, a photo will be taken and then saved into the Micro SD card. You can use command D00/D01 to read photos. |  |
| Applicable Model | MVT600/T1/T333/T3   |  |
| Example          | Example   |  |
| GPRS Sending     | @@A42,353358017784062,B96,000000000000001*95\r\n  |  |
| GPRS Reply       | \$\$A28,353358017784062,B96,OK*FA\r\n   |  |

#### 3.33 Reading a Photographing Event Flag (MVT600/T1/T333) - B97

| GPRS Sending     | B97   |  |
|------------------|---|--|
| GPRS Reply       | B97,Photographing event flag                                    |  |
| Description      | To know which event has enabled the function for taking photos. |  |
| Applicable Model | MVT600/T1/T333/T3   |  |
| Example          | Example   |  |
| GPRS Sending     | @@C25,353358017784062,B97*6C\r\n                                |  |
| GPRS Reply       | \$\$C42,353358017784062,B97,000000000000001*60\r\n              |  |

#### 3.34 Setting Event Authorization - B99

| GPRS Sending | B99, <sms>/&lt;0&gt;,<phone location="" number="">/<authorized number="" phone="">,<operation< th=""><th></th></operation<></authorized></phone></sms> |  |
|--------------|--|--|
|              | code>, [Event code 1][Event code n]  |  |



|                  | B99, <call>/&lt;1&gt;,<phone location="" number="">/<authorized number="" phone="">,<operation code="">, [Event code 1][Event code n] B99,<gprs>/&lt;2&gt;,<operation code="">, [Event code 1][Event code n] 0000,B99,<camera>/&lt;3&gt;,<operation code="">, [Event code 1][Event code n] B99,<buzzer>/&lt;4&gt;,<operation code="">, [Event code 1][Event code n].</operation></buzzer></operation></camera></operation></gprs></operation></authorized></phone></call>   |
|------------------|---|
| GPRS Reply       | B99, <sms>/&lt;0&gt;,<phone location="" number="">,<authorized number="" phone="">, [Event code 1][Event code n] B99,<call>/&lt;1&gt;,<phone location="" number="">,<authorized number="" phone="">, [Event code 1][Event code n] B99,<gprs>/&lt;2&gt;,[Event code 1][Event code n] B99,<camera>/&lt;3&gt;,[Event code 1][Event code n] B99,<buzzer>/&lt;4&gt;,[Event code 1][Event code n]</buzzer></camera></gprs></authorized></phone></call></authorized></phone></sms>   |
| Description      | Fields SMS, CALL, CAMERA, GPRS, and BUZZER can be presented by 0–4 in decimal string.  Operation codes GET, SET, ADD, and DEL can be presented by 0–3 in decimal string. These characters are not case-sensitive.  Note: Ensure that an authorized phone number is set by using the A71 command or the parameter configuration tool before the B99 command is used to set the SMS/CALL event code. The tracker compares the authorized phone number issued by B99 with the authorized phone number (excluding +86 characters) of the tracker. If the phone numbers are the same, the new event code will be stored. If the phone numbers are inconsistent, an error SMS will be sent. |
| Applicable Model | All   |
| Example          |   |
| GPRS Sending     | @@B34,863070010825791,B99,gprs,get*BC\r\n   |
| GPRS Reply       | \$\$B33,863070010825791,B99,1,17,18*B5\r\n  |

#### 3.35 Output Control – C01

| GPRS Sending | CO1,Speed,ABCDE  |
|--------------|--|
| GPRS Reply   | C01,OK   |
| Description  | When the speed is <b>0</b> , 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 lower 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/MVT340/MVT380/MVT600/T1/MVT800/T333/T3 |
| Example          |   |
| GPRS Sending     | @@M34,353358017784062,C01,20,10122*18\r\n     |
| GPRS Reply       | \$\$M28,353358017784062,C01,OK*F9\r\n         |

# 3.36 Notifying the Tracker of Sending an SMS – CO2

| GPRS Sending     | CO2, X,Phone number,Content   |
|------------------|---|
| GPRS Reply       | C02,OK  |
| Description      | Used for the platform to notify the tracker of sending an SMS to a mobile phone.  X = 0: in TEXT mode  X = 1: in Unicode mode  Phone number: a maximum of 16 digits  Content: a maximum of 140 characters  After receiving the message, the tracker sends Content information to specified phone numbers. |
| Applicable Model | All   |
| Example          |   |
| GPRS Sending     | @@f47,353358017784062,C02,0,15360853789,Meitrack*B1\r\n   |
| GPRS Reply       | \$\$f28,353358017784062,C02,OK*13\r\n   |

#### 3.37 Setting a GPRS Event Transmission Mode - C03

| GPRS Sending     | C03, X  |  |
|------------------|---|--|
| GPRS Reply       | CO3,OK  |  |
| Description      | <ul> <li>X = 0: automatic event report (default)</li> <li>X = 1: Before another event can be transmitted, existing event reports need to be confirmed and deleted on the server by the AFF command. Select this mode when GPRS uses UDP.</li> </ul> |  |
| Applicable Model | Excluding T322X   |  |
| Example          | Example   |  |
| GPRS Sending     | @@f27,353358017784062,C03,0*E1\r\n  |  |
| GPRS Reply       | \$\$f28,353358017784062,C03,OK*14\r\n   |  |



#### 3.38 GPRS Information Display (LCD Display) - C13

| GPRS Sending     | C13,Level,Type,Content   |
|------------------|--|
| GPRS Reply       | C13,OK   |
| Description      | The command is used to display GPRS platform information on the LCD display.             |
|                  | Level: Level 0 indicates normal information, while level 1 indicates urgent information. |
|                  | Type: indicates the encoding mode. E = ASCII. U = UNICODE2.                              |
|                  | Content: indicates the information text and has a maximum of 150 bytes.                  |
| Applicable Model | MVT600/T1/T333/T3  |
| Example          |  |
| GPRS Sending     | @@m42,013777001338688,C13,0,E,Test Message*08  |
| GPRS Reply       | \$\$m28,013777001338688,C13,OK*1C  |

## 3.39 Registering a Temperature Sensor Number (MVT600/T1/T333/T3/MVT800) – C40

| GPRS Sending | C40,SN1 & number 1,SN2 & number 2,,SNn & number n                                      |
|--------------|--|
| GPRS Reply   | 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 index all sensors and bind information in the database,      |
|              | such as the IMEI number, 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 in         |
|              | temperature data 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/T333/MVT800/T3                              |  |
| <b>Example</b> (ASCII is used to display examples because hexadecimal characters cannot be displayed.) |   |  |
| GPRS Sending   | @@q35,012896001078259,C40,(1BD5#040000W02*50\r\n      |  |
| GPRS Reply   | \$\$q36,012896001078259,C40,(1BD5#040000W0201*1B \r\n |  |

#### 3.40 Deleting a Registered Temperature Sensor (MVT600/T1/T333/MVT800/T3) - C41

| GPRS Sending     | C41,Number 1,Number 2,Number n  |
|------------------|---|
| GPRS Reply       | C41,Number 1,Result,Number 2,Result,Number n,Result   |
| Description      | Number: indicates the registered sensor number; hexadecimal. The value ranges from 1 to 254.  Result: Decimal. 1 indicates deletion succeeded. 2 indicates that the number does not exist. 3 indicates deletion failed.  To delete all registered temperature sensors, send command C41 only. If deletion is successful, <b>OK</b> is returned. If not, <b>Error</b> is returned. |
| Applicable Model | MVT600/T1/T333/MVT800/T3  |
| Applicable Model | WIV 1000/11/1333/WIV 1600/13  |
| Example          |   |
| GPRS Sending     | @@n28,012896001078259,C41,01*19\r\n   |
| GPRS Reply       | \$\$n30,012896001078259,C41,01,1*37\r\n   |

#### 3.41 Reading the Temperature Sensor SN and Number (MVT600/T1/T333/MVT800/T3) – C42

| GPRS Sending  | C42  |
|---|--|
| GPRS Reply  | 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 <b>0</b> , the temperature sensor is not registered. |
| Applicable Model  | MVT600/T1/T333/MVT800/T3   |
| Example (ASCII is used to display examples because hexadecimal characters cannot be displayed.) |  |
| GPRS Sending  | @@m25,012896001078259,C42*89\r\n   |
| GPRS Reply  | \$\$t45,012896001078259,C42,(B4v#040000R00,(1BD5#040000W00*13\r\n  |

# 3.42 Setting a Temperature Value for the High/Low Temperature Alarm and Logical Name (MVT600/T1/T333/MVT800/T3) – C43

| GPRS Sending | 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 Reply   | 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 <b>0</b> , 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. <b>0x01</b> indicates setting succeeded. <b>0x02</b>     |
|  | indicates that the number is not located. <b>0x03</b> indicates that setting failed due to wrong |
|  | parameters.  |
|  | Note: Separators (/) are not required between parameters.  |
| Applicable Model   | MVT600/T1/T333/MVT800/T3   |
| <b>Example</b> (ASCII is used to display examples because hexadecimal characters cannot be displayed.) |  |
| GPRS Sending   | @@o57,012896001078259,C43,01(1BD5#040000W<0005000101T1#00000000000000                            |
|  | 0000000000*3F  |
| GPRS Reply   | \$\$028,012896001078259,C43,0101*85  |

# 3.43 Reading Temperature Sensor Parameters (MVT600/T1/ T333/MVT800/T3) – C44

| GPRS Sending     | C44  |
|------------------|--|
| GPRS Reply       | 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/T333/MVT800/T3   |



| Example (ASCII is used to display examples because hexadecimal characters cannot be displayed.) |   |
|---|---|
| GPRS Sending  | @@r25,012896001078259,C44*90\r\n  |
| GPRS Reply  | \$\$r274,012896001078259,C44,01(B4v#04000R0000000000000000000000000000000 |

#### 3.44 Checking Temperature Sensor Parameters (MVT600/T1/T333/MVT800/T3) - C46

| GPRS Sending     | C46   |  |
|------------------|---|--|
| GPRS Reply       | C46,Checksum  |  |
| Description      | Checksum: 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 checksum. |  |
| Applicable Model | MVT600/T1/T333/MVT800/T3  |  |
| Example          |   |  |
| GPRS Sending     | @@i25,012896001078259,C46*89\r\n  |  |
| GPRS Reply       | \$\$i28,012896001078259,C46,12_*F1\r\n  |  |

## 3.45 Setting Fuel Parameters (MVT600/T1/T333/MVT800/T3) - C47

| GPRS Sending | C47,Sensor type,Alarm percentage upper limit,Alarm percentage lower limit                       |
|--------------|---|
| GPRS Reply   | C47,OK  |
| Description  | Sensor type: 0, 1, 2, and 3   |
|              | • <b>0</b> indicates that any fuel sensor is not connected.                                     |
|              | • 1 indicates that a C-type fuel sensor is connected (AD2).                                     |
|              | • 2 indicates that a R-type fuel sensor is connected (AD2).                                     |
|              | • 3 indicates that a V-type 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 <b>0</b> , the alarm is cleared. When the value |
|              | is not 0, GPRS and SMS event flags 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 <b>0</b> , the alarm is cleared. When the value |
|              | is not 0, GPRS and SMS event flags 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 modify a parameter, other parameters must be left 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 fuel sensor: resistance output fuel sensor       |
|                  | C-type fuel sensor: capacitance output fuel sensor      |
|                  | V-type fuel sensor: voltage output fuel sensor          |
|                  | Fuel sensors A53 and A54 are the V type of fuel sensor. |
| Applicable Model | MVT600/T1/T333/MVT800/T3                                |
| Example          |   |
| GPRS Sending     | @@f33,353358017784062,C47,2,90,10*0A\r\n                |
| GPRS Reply       | \$\$f28,353358017784062,C47,OK*1C\r\n                   |

#### 3.46 Reading Fuel Parameters (MVT600/T1/T333/MVT800/T3) - C48

| GPRS Sending     | C48   |  |
|------------------|---|--|
| GPRS Reply       | C48,Sensor type,Alarm percentage upper limit,Alarm percentage lower limit                       |  |
| Description      | The format of returned parameters is the same as that set by C47. These parameters are decimal. |  |
| Applicable Model | MVT600/T1/T333/MVT800/T3  |  |
| Example          |   |  |
| GPRS Sending     | @@c25,353358017784062,C48*89\r\n  |  |
| GPRS Reply       | \$\$c33,353358017784062,C48,2,90,10*D0\r\n  |  |

## 3.47 Setting a Fuel Theft Alarm (T1/MVT600/MVT800/T333) - C49

| GPRS Sending     | C49,Time for fuel check,Percent of fuel decrease  |
|------------------|---|
| GPRS Reply       | C49,OK  |
| Description      | Time for fuel check = 0: function disabled.   |
|                  | Time for fuel check = [1255]: function enabled. Decimal; unit: minute; default value: 3.    |
|                  | Percent of fuel decrease = 0: function disabled.  |
|                  | Percent of fuel decrease = [1100]: function enabled. Decimal; default value: 2.             |
|                  | By default, the percent of fuel decrease is 2% within 3 minutes, a fuel theft alarm will be |
|                  | generated (for example: C49,3,2).   |
|                  | Note: The percent of fuel decrease must be over two times larger than the percent of        |
|                  | fuel sensor accuracy. For example, if the fuel sensor accuracy is 10 mm and its height is   |
|                  | 500 mm, the recommended percent of fuel decrease is 4% (10/500 x 2).                        |
| Applicable Model | MVT600/T1/T333/MVT800   |
| Example          |   |
| GPRS Sending     | @@c29,353358017784062,C49,3,2*4B\r\n  |
| GPRS Reply       | \$\$c28,353358017784062,C49,ok*5B\r\n   |

## 3.48 Obtaining a Picture (MVT600/T1/T333/T3) - D00

| GPRS Sending | D00,File name,Picture data packet start number                           |
|--------------|--|
| GPRS Reply   | 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 start sequence number of a picture           |
|                  | package. The minimum value is <b>0</b> , 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 2 seconds, the server sends the D00 command to obtain          |
|                  | picture data packets from the ninth picture data packet.                                     |
| Applicable Model | MVT600/T1/T333/T3  |
| Example          |  |
| GPRS Sending     | @@O48,353358017784062,D00,0215080432_C2E03.jpg,0*DB\r\n                                      |
| GPRS Reply       | The example cannot be displayed because of hexadecimal characters.                           |

# 3.49 Obtaining the Picture List (MVT600/T1/T333/T3) – D01

| GPRS Sending | D01,Picture data packet start number  |
|--------------|---|
| GPRS Reply   | 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 start sequence number of a picture list.              |
|              | The minimum number is <b>0</b> . For example, when the value is <b>0</b> , you can obtain the picture |
|              | list from the first picture package. When the value is 4, you can 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 <b>1</b> .  |
| Example      |   |
| GPRS Sending | @@A27,353358017784062,D01,0*BB\r\n  |
| GPRS Reply   | \$\$A480,353358017784062,D01,3,0,0506162517_C1E03.jpg 0506162517_C1E11.jpg 05                         |
|              | 06162624_C1E03.jpg 0506162630_C1E11.jpg 0506162720_C1E03.jpg 0506162721_C1                            |
|              | E03.jpg 0215080547_C1E03.jpg 0215080547_C1E11.jpg 0215080626_C1E03.jpg 0215                           |
|              | 080626_C1E11.jpg 0215080827_C1E03.jpg 0215080827_C1E11.jpg 0215080850_C1E0                            |
|              | 3.jpg 0215080850_C1E11.jpg 0507145426_C1E03.jpg 0507145426_C1E11.jpg 050714                           |
|              | 5512_C2E03.jpg 0507145512_C2E11.jpg 0215080050_C3E03.jpg 0215080050_C3E11.j                           |
|              | pg 0215080459_C3E03.jpg 021508050*41\r\n  |
|              |   |



#### 3.50 Deleting a Picture (MVT600/T1/T333/T3) - D02

| GPRS Sending     | D02,Picture name (1) Picture name (2)  Picture name (n)  |  |
|------------------|--|--|
| GPRS Reply       | D02,OK   |  |
| Description      | Picture name (n): indicates the name of the picture to be deleted. You can delete multiple pictures. Picture names are separated by  . |  |
| Applicable Model | MVT600/T1/T333/T3  |  |
| Example          |  |  |
| GPRS Sending     | @@E110,353358017784062,D02,0506162517_C1E03.jpg 0506162517_C1E11.jpg 0506<br>162624_C1E03.jpg 0506162630_C1E11.jpg *4E\r\n             |  |
| GPRS Reply       | \$\$F28,353358017784062,D02,OK*F4\r\n  |  |

#### 3.51 Taking Photos on Demand (MVT600/T1/T333/T3) - D03

| GPRS Sending     | D03,Camera number,Picture name,  |
|------------------|--|
| GPRS Reply       | D03, OK  |
| Description      | Camera number: The minimum value is <b>1</b> , indicating the first camera. The maximum value depends on the number of cameras connected to the tracker. The maximum value is generally <b>2</b> .  Picture name: indicates the name of a picture. |
| Applicable Model | MVT600/T1/T333/T3  |
| Example          |  |
| GPRS Sending     | @@D46,353358017784062,D03,1,camera_picture.jpg*21\r\n  |
| GPRS Reply       | \$\$D28,353358017784062,D03,OK*F3\r\n  |

#### 3.52 Authorizing an RFID Card (MVT600/T1/T333/T3) - D10

| GPRS Sending     | D10,RFID(1),RFID(2),,RFID(n)  |
|------------------|---|
| GPRS Reply       | D10, OK   |
| Description      | RFID (n): indicates the authorized RFID card number. The value ranges from 1 to 4294967295. Decimal.  A maximum of 50 RFID cards can be authorized at a time. |
| Applicable Model | MVT600/T1/T333/T3   |
| Example          |   |
| GPRS Sending     | @@f43,353358017784062,D10,13737431,13737461*17\r\n  |
| GPRS Reply       | \$\$f28,353358017784062,D10,OK*13\r\n   |

#### 3.53 Authorizing RFID Cards in Batches (MVT600/T1/T333/T3) - D11

| GPRS Sending | D11,RFID card start number,n  |
|--------------|---|
| GPRS Reply   | D11, OK   |
| Description  | RFID card start 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/T333/T3                           |
| Example          |   |
| GPRS Sending     | @@e36,353358017784062,D11,13737431,1*AA\r\n |
| GPRS Reply       | \$\$e28,353358017784062,D11,OK*13\r\n       |

#### 3.54 Checking RFID Authorization (MVT600/T1/T333/T3) - D12

| GPRS Sending     | D12,RFID   |
|------------------|--|
| GPRS Reply       | D12, n   |
| Description      | RFID: ranges from 1 to 4294967295. Decimal.                |
|                  | n: When <b>n</b> is <b>0</b> , the RFID is not authorized. |
| Applicable Model | MVT600/T1/T333/T3  |
| Example          |  |
| GPRS Sending     | @@C34,353358017784062,D12,13737431*2A\r\n                  |
| GPRS Reply       | \$\$C27,353358017784062,D12,0*87\r\n                       |

#### 3.55 Reading an Authorized RFID (MVT600/T1/T333/T3) - D13

| GPRS Sending     | D13,RFID packet start number   |
|------------------|--|
| GPRS Reply       | D13,Number of RFID packets,Current RFID packet number,RFID(1)RFID(2)RFID(n)  |
| Description      | RFID packet start number: indicates the start sequence number of the RFID packet. The minimum value is <b>0</b> . For example, when the value is <b>0</b> , you can obtain the package list from the first RFID packet. When the value is <b>4</b> , 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 <b>0</b> .  RFID (n): has eight hexadecimal characters. |
| Applicable Model | MVT600/T1/T333/T3  |
| Example          |  |
| GPRS Sending     | @@w27,353358017784062,D13,0*F4\r\n   |
| GPRS Reply       | The example cannot be displayed because of hexadecimal characters.   |

# 3.56 Deleting an Authorized RFID Card (MVT600/T1/T333/T3) – D14

| GPRS Sending     | D14,RFID(1),RFID(2),,RFID(n)  |
|------------------|---|
| GPRS Reply       | D14, OK   |
| Description      | RFID (n): indicates the RFID to be deleted. The value ranges from 1 to 4294967295.  Decimal.  A maximum of 50 RFID cards can be deleted at a time. One SMS (including protocols) cannot exceed 140 bytes. |
| Applicable Model | MVT600/T1/T333/T3   |
| Example          |   |



| GPRS Sending | @@Q34,353358017784062,D14,13723455*3B\r\n |
|--------------|---|
| GPRS Reply   | \$\$Q28,353358017784062,D14,OK*02\r\n     |

#### 3.57 Deleting Authorized RFID Cards in Batches (MVT600/T1/T333/T3) - D15

| GPRS Sending     | D15,RFID card start number,n  |
|------------------|---|
|                  | ,   |
| GPRS Reply       | D15, OK   |
| Description      | RFID card start number: ranges from 1 to 4294967295. Decimal.                               |
|                  | n: indicates the number of RFID cards to be deleted in batches. Decimal. The maximum        |
|                  | value is <b>128</b> .   |
|                  | When the card start number is a value ranging from 1 to 4294967295 and ${\bf n}$ is greater |
|                  | than or equal to 65536, all authorized numbers will be deleted.                             |
| Applicable Model | MVT600/T1/T333/T3   |
| Example          |   |
| GPRS Sending     | @@K36,353358017784062,D15,13723455,3*97\r\n   |
| GPRS Reply       | \$\$K28,353358017784062,D15,OK*FD\r\n   |

#### 3.58 Checking the Checksum of the Authorized RFID Database (MVT600/T1/T333/T3) - D16

| GPRS Sending     | D16  |
|------------------|--|
| GPRS Reply       | 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 checksum for responding. After the server receives the checksum, 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/T333/T3  |
| Example          |  |
| GPRS Sending     | @@u25,353358017784062,D16*97\r\n   |
| GPRS Reply       | \$\$u28,353358017784062,D16,18*F7\r\n  |

#### 3.59 Setting the Maintenance Mileage (TC68S) - D65

| GPRS Sending | D65,Eight mileage points  |
|--------------|---|
| GPRS Reply   | D65,OK  |
| Description  | Send eight mileage points.  |
|              | Eight mileage points: (Current mileage + Time interval between maintenance services x |
|              | 1), (Current mileage + Time interval between maintenance services x 2), (Current      |
|              | mileage + Time interval between maintenance services x 3), (Current mileage + Time    |
|              | interval between maintenance services x 4), (Current mileage + Time interval between  |



|                  | maintenance services $x$ 5), (Current mileage + Time interval between maintenance services $x$ 6), (Current mileage + Time interval between maintenance services $x$ 7), (Current mileage + Time interval between maintenance services $x$ 8) |
|------------------|---|
| Applicable Model | TC68S   |
| Example          | Set mileage points: 30000, 50000,60000,70000,80000,90000,100000,110000  |
| GPRS Sending     | @@V75,353358017784062,D65,30000,50000,60000,70000,80000,90000,100000,1100 00*EA\r\n   |
| GPRS Reply       | \$\$V28,353358017784062,D65,OK*OD\r\n   |

## 3.60 Setting Maintenance Time (TC68S) - D66

| GPRS Sending     | D66,Eight time points  |
|------------------|--|
| GPRS Reply       | D66,OK   |
| Description      | Send the time point of next eight times of maintenance services.                   |
|                  | Time point: days from January 1, 1990 to the next maintenance                      |
| Applicable Model | TC68S  |
| Example          | Set the time point. The next maintenance time is November 22, 2013. The first time |
|                  | point 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   |

#### 3.61 Reading Device's Firmware Version and SN - E91

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

#### 3.62 Restarting the GSM Module - F01

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



#### 3.63 Restarting the GPS Module - F02

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

# 3.64 Setting the Mileage and Run Time $\,-\,$ F08

| GPRS Sending     | F08,Run time,Mileage   |
|------------------|--|
| GPRS Reply       | F08,OK   |
| Description      | Run time:  Value range: [04294967295]  Decimal  Unit: second  If you do not want to set the parameter, leave it blank.  Mileage:  Value range: [04294967295]  Decimal  Unit: meter |
|                  | If you do not want to set the parameter, leave it blank.   |
| Applicable Model | All  |
| Example          |  |
| GPRS Sending     | @@D40,353358017784062,F08,0,4825000*51\r\n   |
| GPRS Reply       | \$\$D28,353358017784062,F08,OK*FA\r\n  |

#### 3.65 Deleting SMS/GPRS Cache Data – F09

| GPRS Sending     | F09,Number  |
|------------------|---|
| GPRS Reply       | F09,OK  |
| Description      | If the number is <b>1</b> , SMS cache data to be sent is deleted.  If the number is <b>2</b> , GPRS cache data to be sent is deleted.  If the number is <b>3</b> , SMS and GPRS cache data to be sent is deleted. |
| Applicable Model | All   |
| Example          |   |
| GPRS Sending     | @@E27,353358017784062,F09,1*CA\r\n  |
| GPRS Reply       | \$\$E28,353358017784062,F09,OK*FC\r\n   |



#### 3.66 Restoring Initial Settings - F11

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

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