



File Name:	MEITRACK GPRS Protocol	Creator:	Cavana Cheung
Project:	MVT340/MVT380/MVT100/ MVT600/MVT800/T1/T3/MT90/TC68/TC68S	Creation Date:	2010-09-16
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MEITRACK® GPRS PROTOCOL

**For MT90/MVT340/MVT380/MVT100
MVT600/MVT800/T1/T3/TC68/TC68S**

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I. Command Format

1.1 GPRS Command Format

From server to tracker:

@@<package flag><L>,<IMEI>,<command>,<data><*checksum>\r\n

From tracker to server:

\$\$<package flag><L>,<IMEI>,<command>,<data><*checksum>\r\n

1.2 Device Data Format (General)

Note: It is for all models, except TC68.

\$\$<packageflag><L>,<IMEI>,<command>,<event
code>,<(-)yy.ddddd>,<(-)xxx.ddddd>,<yymmddHHMMSS>,<Z>,<N>,<G>,<Speed>,<Heading>,<HDOP>,<Altitude>
,<Journey>,<Runtime>,<Base ID>,<State>,<AD>,<RFID>/<Picture>/<Fence>/<Temperature Sensor Index
No..>,<Customize Data>,<Protocol Version>,<Fuel Percentage>,<Temperature Sensor Index No.1
Value|Temperature SensorIndex No.2 Value|.....Temperature Sensor Index No.n Value><*checksum>\r\n

Note:

' ' is list separator in ASCII (0x2C);

Do not input '<' and '>' when writing a command;

All multi-byte data complies with the following sequence: High byte prior to low byte;

GPRS package (including data) flow is about 160 bytes.

Description of GPRS Data

Parameter	Description	Example
@@	2 bytes. Header of the package from server to tracker. It is in ASCII(0x40)	@@
\$\$	2 bytes. Header of the package from tracker to server, It is in ASCII(0x24)	\$\$
package flag	1 byte. In ASCII from 0x41 to 0x7A	Q
L	Length from its following separator ' ' to the ending character '\r\n'. It is decimal. \$\$<package flag><L>,<IMEI>,<command>,<data><*checksum>\r\n	25
IMEI	Tracker's IMEI is normally 15 digitals.	353358017784062
command	Command code in Hex string. Please refer to the Command List and Command Details below.	AAA
Code	Event code. Decimal.	1

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	Refer to Annex 2 for more details	
<->yy.ddddd	Latitude: in unit of degree. Decimal. '-' means south, no minutes means north yy = degrees; dddddd = decimal part of degree	22.756325 -23.256438
<->xxx.ddddd	Longitude: in unit of degree. Decimal. '-' means west, no minutes means east xxx = degrees; dddddd = decimal part of degree	114.752146 -114.821453
yymmddHHMMSS	yy = year mm = month dd = date HH = hour MM = minute SS = second Decimal digit	091221102631
Z	GPS status indicator: A = valid, V = invalid	A = Valid
N	Numbers of satellites available. Decimal.	5
G	GSM signal. Decimal(0~31)	12
Speed	KM/h. Decimal.	58
Heading	Heading, in unit of degree. Decimal.(0~359)	275
HDOP	Horizontal Dilution of Precision, 0.5-99.9. Decimal. HDOP Values below 4 are great and value above 8 are bad HDOP is blank when no GPS fix.	5
Altitude	MSL Altitude, in unit of meter. Decimal.	118
Mileage	In unit of meter. Decimal. The total accumulated mileage and maximum of 4294967295 meters.	564870
Runtime	In unit of second. Decimal. The total accumulated runtime and maximum 4294967295 seconds.	2546321
Base ID	ID of the base station including MCC MNC LAC CI Note: for SMS report, the Base ID is empty. MCC and MNC are decimal; LAC and CI are Hex.	460 0 E166 A08B
State	Status of 8 inputs and 8 outputs. Hex. Bit0...Bit7 is output state, Bit0 is Output1 state Bit8...Bit15 is input state, Bit8 is Input1 state	0421(HEX String) = <u>0000010000100001</u>
AD	Separated by ' '. Hex. AD1 AD2 AD3 Battery AD External Power AD	123 456 235 1234 324 654 1456 222(HEX

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	<p>Note: for SMS report, AD is empty.</p> <p>Analog AD1,AD2,AD3 Voltage formula: MVT100/MVT340/MVT380: $(AD*6)/1024$ T1/T3/MVT600/MVT800: $(AD*3.3*2)/4096$</p> <p>Battery AD (AD4) formula: MVT100/MVT340/MVT380: $(AD4*3*2)/1024$ MT90/T1/T3/MVT600/MVT800/TC68/TC68S: $(AD4*3.3*2)/4096$ T311: AD4/100</p> <p>External Power AD (AD5) formula: MVT100/MVT340/MVT380: $(AD5*3*16)/1024$ T1/T3/MVT600/MVT800/TC68/TC68S: $(AD5*3.3*16)/4096$ T311: AD5/100</p>	String)
RFID	<p>IC Card identity code. Hex. Only shown in GPRS Event Code 37</p>	42770680(HEX String)
Picture	<p>Picture name Only shown in GPRS Event Code 39</p>	0918101221_C2E03
Fence	<p>Fence Number Only shown in Event Code 20 and 21</p>	2
Temperature Sensor Index No.	<p>The Index No. is set by command C40 Format: 2 Hex. Note: Only event 50,51 contain Temperature Sensor Index No.</p>	08 Means Temperature SensorIndex No.8
Customize Data	<p>Reserved separator remained</p>	
Protocol Version	<p>Default: empty Format: Decimal = empty, for MT90/MVT100/ MVT340/MVT380/TC68S, and T1/MVT600/ MVT800 without temperature and fuel sensors =1, for T1/MVT600/ MVT800 with temperature and fuel sensor =2-49, reserved for general Meitrack protocol</p>	1 Means:protocol version with Fuel Percentage and Temperature value
Fuel Percentage	<p>Fuel Percentage Format: 4 Hex.High byte is the Integerbit of the percentage,lower byte is the decimal of the percentage. Fuel type=0, no Fuel sensor, value is empty.</p>	241E Means fuel percentage: 36.30%.
Temperature Index No. &Value	<p>Temperature Index No. Format: 6 Hex. The highest byte is the Index No. of sensor. The middle byte is the integer of temperature (-127~+127)</p>	011A09 021A15 061E20 Means 3 temperature sensors, numbers are 1,2, and 6;

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	Lower bytes is the decimal of the temperature.	Temperature values are 26.09 °C, 26.21 °C, 30.32 °C
*	1 byte. A separator between data and checksum. It is in ASCII (Hex 0x2A)	*
checksum	2 bytes. Indicating the sum of all data (exclude checksum itself and the ending character). It is in HEX String. \$\$<package flag><L><IMEI><command><data><*checksum>\r\n	BE
\r\n	2 bytes. Ending character in ASCII (0x0d, 0x0a)	\r\n

1.3 Device Data Format (For TC68)

\$\$<packageflag><L><IMEI><command><event code><(-)yy.ddddd><(-)xxx.ddddd><ymmddHHMMSS><Z><N><G><Speed><Heading><HDOP><Altitude><Journey><Runtime><Base ID><State><AD><RFID>/<Picture>/<Fence><Customize Data><Protocol Version><RPM><Engine Load Calculation><Engine Coolant Temperature><Fuel Consumption of 100KM><Intake Air Temperature><Oil Pressure><Atmospheric Pressure><Intake-tube absolute Pressure><Air Flow><Throttle Position><Mileage><Percentage of Remain Fuel><Fault Codes and Freeze Frame/Ready Status><*checksum>\r\n

Note:

- ' ' is list separator in ASCII (Hex 0x2C);
- Do not put '<' and '>' when writing a command;
- All multi-byte data complies with the following sequence: High byte prior to low byte;
- GPRS package flow is about 160 bytes;
- Speed and Mileage is calculated from OBD data if TC68 could read them, meanwhile, running time is accumulated. Otherwise, they are calculated from GPS data;
- Car Battery Voltage is calculated by analog value of external voltage;
- Protocol Version 50 ≤ V ≤ 99 for OBD devices, begins from 50;
- If OBD data is empty, it means the vehicle's data can't be read by TC68.

Description of GPRS Data

Parameter	Description	Example
@@	2 bytes. Header of the package from server to tracker. It is in ASCII (0x40)	@@
\$\$	2 bytes. Header of the package from tracker to server, It is in ASCII (0x24)	\$\$
package flag	1 byte. In ASCII from 0x41 to 0x7A	Q
L	Length from its following separator ' ' to the ending character '\r\n'. It is decimal.	25

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	<pre> \$\$\$<package flag><L><IMEI><command><data><checksum>\r\n </pre>	
IMEI	Tracker's IMEI is normally 15 digitals.	353358017784062
command	Command code in Hex string. Please refer to the Command List and Command Details below.	AAA
Code	Event code. Decimal. Refer to 1.4 Event Code for more details.	1
<->yy.dddddd	Latitude: in unit of degree. Decimal. '-' means south, no minutes means north. yy = degrees; dddddd = decimal part of degree .	22.756325 -23.256438
<->xxx.dddddd	Longitude: in unit of degree. Decimal. '-' means west, no minutes means east. xxx = degrees; dddddd = decimal part of degree .	114.752146 -114.821453
yymmddHHMMSS	yy = year mm = month dd = date HH = hour MM = minute SS = second Decimal digit	091221102631
Z	GPS status indicator: A = valid, V = invalid.	A = Valid
N	Numbers of satellites available. Decimal.	5
G	GSM signal. Decimal(0~31).	12
Speed	KM/h. Decimal.	58
Heading	Heading, in unit of degree. Decimal (0~359).	275
HDOP	Horizontal Dilution of Precision, 0.5-99.9. Decimal. HDOP Values below 4 are great and value above 8 are bad HDOP is blank when no GPS fix.	5
Altitude	MSL Altitude, in unit of meter. Decimal.	118
Mileage	In unit of meter. Decimal. The total accumulated mileage and maximum of 4294967295 meters.	564870
Runtime	In unit of second. Decimal. The total accumulated runtime and maximum.4294967295 seconds.	2546321
Base ID	ID of the base station including MCC MNC LAC CI Note: for SMS report, the Base ID is empty.	460 0 E166 A08B

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	MCC and MNC are decimal; LAC and CI are Hex.	
State	Status of 8 inputs and 8 outputs. Hex. Bit0...Bit7 is output state, Bit0 is Ouput1 state Bit8...Bit15 is input state, Bit8 is Input1 state	0421(HEX String) = <u>0000010000100001</u>
AD	Separated by ' '. Hex. AD1 AD2 AD3 Battery AD External Power AD Note: for SMS report, AD is empty. Analog AD1,AD2,AD3 Voltage formula: MVT100/MVT340/MVT380: $(AD*6)/1024$ T1/T3/MVT600/MVT800: $(AD*3.3*2)/4096$ Battery AD formula: MVT100/MVT340/MVT380: $(AD4*3*2)/1024$ MT90/T1/T3/MVT600/MVT800/TC68/TC68S: $(AD4*3.3*2)/4096$ T311: AD4/100 External Power AD formula: MVT100/MVT340/MVT380: $(AD5*3*16)/1024$ T1/T3MVT600/MVT800/TC68/TC68S: $(AD5*3.3*16)/4096$ T311: AD5/100	123 456 235 1234 324 654 1456 222(HEX String)
RFID	IC Card identity code. Hex. Only shown in GPRS Event Code 37	42770680(HEX String)
Picture	Picture name Only shown in GPRS Event Code 39	0918101221_C2E03
Fence	Fence Number Only shown in Event Code 20 and 21	2
Customize Data	Reserved, can be customized for external sensor or other values	
Protocol Version(V)	$50 \leq V \leq 99$ for OBD devices, default 50	50
RPM	Value: 0~6500, Unit: Rpm(R/M), Decimal.	1000
Engine Load Calculation	The percentage of engine load Value: 0~100, Unit: %, Decimal.	50
Engine Coolant Temperature	Engine Coolant Temperature Value: 0~110, Unit: degC , Decimal.	100
Fuel Consumption Per 100KM	Fuel Consumption Per 100KM. Value: 0~50.0, Unit: L/100KM, Decimal string, accurate to 1 decimal place.	10.5
Intake Air Temperature	Value: 0~80, Unit: °C, Decimal.	50
Oil Pressure	Value: 0~765, Unit: kPa. Decimal string, accurate to 1 decimal place.	3.7
Atmospheric	Value: 0~110, Unit: kPa. Decimal.	80

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Pressure		
Intake-tube absolute pressure	Value: 0~100, Unit: kPa, Decimal.	35
Air Flow	Value: 0~30, Unit: g/s. Decimal.	4
Throttle Position	Value: 0~100, Unit: %. Decimal.	3
Mileage	One mileage: from the engine start to stop Value: 0~4294967295, Unit: meter.Decimal.	100000
Percentage of Remain Fuel	Percentage of Remain Fuel Unit: %. Decimal.	70
Fault Codes and Freeze Frame	Only appears in fault codes alarm event:140 Fault Codes is the first 4 characters, freeze frame PID and dataflow are HEX String follows. PID ends as 0x00. Each 4 characters of data flow are corresponding to 1 PID.	0026...
Ready Status	Only appears in Ready Status Alarm event: 141	FFFFBA21
*	1 byte. A separator between data and checksum. It is in ASCII(Hexadecimal digits 0x2A)	*
checksum	2 bytes. Indicating the sum of all data (exclude checksum itself and the ending character). It is in HEX String. <u>\$\$<package flag><L><IMEI><command><data><*checksum>\r\n</u> Example: @@Q25,353358017784062,A10*6A\r\n Checksum part:@@Q25,353358017784062,A10* Convert to HEX String: 40 40 51 32 35 2C 33 35 33 33 35 38 30 31 37 37 38 34 30 36 32 2C 41 31 30 2A Sum up 40 to 2A is 056A, get the low byte 6A, 6A is the checksum.	6A
\r\n	2 bytes. Ending character in ASCII (0x0d,0x0a)	\r\n

1.4 Event Code

Event Code	Event	Default SMS Header (max 16 bytes)	Default GPRS Flag	Default SMS Flag	Default Picture Flag
1	Input 1 Active (SOS pressed)	SOS	Y	Y (Only for the first authorized phone number)	Y
2	Input 2 Active	In2	Y	N	N
3	Input 3 Active	In3	Y	N	N

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4	Input 4 Active	In4	Y	N	N
5	Input 5 Active	In5	Y	N	N
9	Input 1 Inactive(SOS released)		N	N	N
10	Input 2 Inactive		N	N	N
11	Input 3 Inactive		N	N	N
12	Input 4 Inactive		N	N	N
13	Input 5 Inactive		N	N	N
17	Low Battery	Low Battery	N	N	N/A
18	Low External Power	Low Power	N	N	N/A
19	Speeding	Speeding	Y	Y	N
20	Enter Geo-fence	Enter GEO	Y	Y	N
21	Exit Geo-fence	Exit GEO	Y	Y	N
22	External Power On	Power On	N	N	N
23	External Power Off	Power Off	N	N	N/A
24	No GPS Signal	No Fix	N	N	N/A
25	Get GPS Signal	Fix	N	N	N/A
26	Enter Sleep	Enter Sleep	N	N	N/A
27	Exit Sleep	Exit Sleep	N	N	N/A
28	GPS Antenna Cut	Antenna Cut	N	N	N
29	Device Reboot	Reboot	N	N	N/A
30	Impact	Impact	Y	N	N
31	Heartbeat Report	(only for GPRS)	Y	N/A	N/A
32	Heading Change Report	Heading Change	Y	N	N/A
33	Distance Interval Report	Distance	Y	N	N/A
34	Current Location Report	Now	A/A	A/A	N/A
35	Time Interval Report	Interval	A/A	A/A	N/A
36	Tow Alarm	Tow	Y	N	N
37	RFID	(only for GPRS)	Y	N/A	N
39	Picture	(only for GPRS)	A/A	N/A	N/A
65	Press Input 1 (SOS) to Call	/	N/A	N	N/A
66	Press Input 2 to Call	/	N/A	N	N/A
67	Press Input 3 to Call	/	N/A	N	N/A
68	Press Input 4 to Call	/	N/A	N	N/A
69	Press Input 5 to Call	/	N/A	N	N/A
70	Reject Incoming Call	/	N/A	Y	N/A
71	Report Location after Incoming Call	/	N/A	Y	N/A

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72	Auto Answer Incoming Call	/	N/A	N	N/A
73	Listen-in (voice monitoring)	/	N/A	N	N/A
129	Rush Decelerate Alarm	Rush Decelerate	Y	N	N/A
130	Rush Accelerate Alarm	Rush Accelerate	Y	N	N/A
131	RPM Over Speed Alarm	RPM Over speed	Y	N	N/A
132	RPM Recovery to Normal from Speeding Alarm	RPM Normal Speed	Y	N	N/A
133	Ignition on when Parking Overtime Alarm	Stop Ignition on	Y	N	N/A
134	“Ignition on when Parking Overtime” Recovery Alarm (Ignition off or Car Runs again)	Ignition Normal	Y	N	N/A
135	Fatigue Driving Alarm	Fatigue Driving	Y	N	N/A
136	Overtime Rest after Fatigue Driving Alarm	Overtime Rest	Y	N	N/A
137	Engine Overheat Alarm	Engine Overheat	Y	N	N/A
138	Speed Recovery to Normal Alarm	Normal Speed	Y	N	N/A
139	Maintenance Alarm	Maintenance	Y	N	N/A
140	Engine Error Alarm	Engine Error	Y	N	N/A
141	Ready Status Error Alarm	Status Error	Y	N	N/A
142	Health Inspect Alarm	Health Inspect	Y	N	N/A
143	Low Fuel Alarm	Low Fuel	Y	N	N/A
144	Ignition On Alarm	Ignition On	Y	N	N/A
145	Ignition Off Alarm	Ignition Off	Y	N	N/A
146	Car Starts Alarm	Start	Y	N	N/A
147	Car Stops Alarm	Stop	Y	N	N/A

Note:

1. Above figures are the Factory Default settings.
2. Y = yes; N = no; N/A = not applicable or unavailable; A/A = always available in all status and cannot be changed.
3. You can use commands to define SMS header, add or delete flag for each function.

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II. Command List

Command	Definition	SMS/GPRS	Applicable Model
A10	Track on Demand	GPRS	All
A11	Set Heartbeat Interval	GPRS	All
A12	Track by Time Interval	SMS/GPRS	All
A13	Heading Change Report	GPRS	All
A14	Track by Distance Interval	SMS/GPRS	All
A15	Track Parking by Time Interval	GPRS	MVT100/340/380/600/T1/T3
A16	Track Parking by Time Interval on/off	GPRS	MVT100/340/380/600/T1/T3
A21	Set GPRS	SMS/GPRS	All
A22	Set DNS Server IP	SMS/GPRS	All
A23	Set Back-up GPRS Server	SMS/GPRS	All
A70	Get all Authorized Phone number	SMS/GPRS	All
A71	Set Multiple Functions Phone Number	SMS/GPRS	All
A72	Set Listen-in Phone Number	Call	All
A73	Set Sleep Mode	SMS/GPRS	All
AAA	Auto Event report	GPRS	All
AFF	Delete GPRS Event in Queue	GPRS	All
B00	Get Authorized Phone Number and SMS Event Flag	SMS/GPRS	All
B01	Authorize Phone Number and SMS Event Flag	SMS/GPRS	All
B02	Add SMS Event Flag to Authorized Phone Number	SMS/GPRS	All
B03	Delete SMS Event Flag from Authorized Phone Number	SMS/GPRS	All
B05	Set Geo-fence Alarm	SMS/GPRS	All
B06	Delete Geo-fence Waypoint	SMS/GPRS	All
B07	Set Speeding Alarm	SMS/GPRS	All
B08	Set Tow Alarm	SMS/GPRS	MVT100/340/380/600/T1/T3
B09	Set Tremble Sensitivity (MVT100/MVT340/MVT380)	SMS/GPRS	MVT100/340/380/T1/T3
B20	Set Tremble Sensitivity (MVT600)	SMS/GPRS	MVT600
B31	Set Extended Functions	SMS/GPRS	All
B32	Set GPS Sleep Mode	SMS/GPRS	All
B33	Set Power Down Mode	SMS/GPRS	All
B34	Set Log Interval	SMS/GPRS	MT90,MVT100/380/600/T1/T3
B35	Time Zone Setting(For SMS Report)	SMS/GPRS	All
B36	Time Zone Setting(For GPRS Report)	SMS/GPRS	All
B91	Set SMS Header for Event	SMS/GPRS	All
B92	Set Event Flag for GPRS Report	GPRS	All

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B93	Get Event Flag of GPRS Report	GPRS	All
B96	Set Event Flag for Taking Picture	GPRS	MVT600
B97	Get Event Flag for Taking Picture	GPRS	MVT600
C01	Output Control	SMS/GPRS	MVT100/340/380/600/T1/T3
C03	Protocol Control	SMS/GPRS	All
C13	GPRS Message Display	GPRS	MVT600
C40	Register the Index Numbers of Temperature Sensors (GPRS)	GPRS	T1/MVT600/MVT800
C41	Delete Registered Temperature Sensor (GPRS)	GPRS	T1/MVT600/MVT800
C42	Read Temperature Sensor SN and Index No. (GPRS)	GPRS	T1/MVT600/MVT800
C43	Set Temperature Value for High/Low Temperature Alert and Logical Name (GPRS)	GPRS	T1/MVT600/MVT800
C44	Read Temperature Sensor Parameters (GPRS)	GPRS	T1/MVT600/MVT800
C45	Read Temperature Value	GPRS	T1/MVT600/MVT800
C46	Check Temperature Sensor Parameters (GPRS)	GPRS	T1/MVT600/MVT800
D00	Take Picture	GPRS	MVT600
D01	Get Picture File Name	GPRS	MVT600
D02	Delete Picture	GPRS	MVT600
D03	Take One Picture	GPRS	MVT600
D30	Set Accelerated Speed of Rush Decelerate Alarm	SMS/GPRS	TC68
D31	Set Accelerated Speed of Rush Accelerate Alarm	SMS/GPRS	TC68
D32	Set RPM Value of RPM Over Speed Alarm	SMS/GPRS	TC68
D33	Set Temperature of Engine Overheat Alarm	SMS/GPRS	TC68
D34	Set Time of Ignition on when Parking Overtime Alarm	SMS/GPRS	TC68
D35	Set Time of Fatigue Driving Alarm	SMS/GPRS	TC68
D36	Set Rest Time after Fatigue Driving	SMS/GPRS	TC68
D37	Set Journey and Running Time of Maintenance Reminder	SMS/GPRS	TC68
D39	OBID Snapshot	GPRS	TC68
D40	Read PID	GPRS	TC68
D41	Read Freeze Frame PID	GPRS	TC68
D42	Read Fault Code	SMS/GPRS	TC68
D43	Read Data of Freeze Frame	GPRS	TC68
D44	Clear Fault Code	SMS/GPRS	TC68
D45	Read Ready Status	SMS/GPRS	TC68
D46	Transmit SMS Text from Platform	GPRS	TC68
D47	Set VIN	SMS/GPRS	TC68

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D48	Read VIN	SMS/GPRS	TC68
D49	Set Vehicle Model	SMS/GPRS	TC68
D50	Read Vehicle Model	SMS/GPRS	TC68
D51	Set Vehicle On-board Diagnostics	SMS/GPRS	TC68
D52	Set Reference Value of On-board Diagnostics Parameters	SMS/GPRS	TC68
D53	Set GPRS Flag of OBD Event	GPRS	TC68
D54	Read GPRS Flag of OBD Event	GPRS	TC68
D55	Set Authorized Phone Numbers and SMS Event Flag	SMS/GPRS	TC68
D56	Read Authorized Phone Numbers and SMS Event Flag	SMS/GPRS	TC68
D57	Add SMS Event Flag to Authorized Phone Number	SMS/GPRS	TC68
D58	Delete Authorized Phone Numbers and SMS Event Flag	SMS/GPRS	TC68
D59	Set OBD SMS Event Characters	SMS/GPRS	TC68
D60	Set Buzzer Flag of Event Alarm	GPRS	TC68
D61	Read Buzzer Flag of Event Alarm	GPRS	TC68
D63	Set Percentage of Low Fuel Alarm	SMS/GPRS	TC68
E91	Get Firmware Version and SN	SMS/GPRS	All
F01	Reboot GSM Module	SMS/GPRS	All
F02	Reboot GPS Module	SMS/GPRS	All
F06	Clear Journey and Running Time	SMS/GPRS	All
F08	Set Mileage and Running Time	SMS/GPRS	All
F09	Clear SMS/GPRS Buffer	SMS/GPRS	MT90, T1/T3/MVT100/380/600/800
F11	Initialization	SMS/GPRS	All

III. Command Details

3.1 Track on Demand (GPRS) – A10

GPRS Set:	A10
GPRS Get:	AAA,34,<->yy.dddddd,<->xxx.dddddd,yyymmddHHMMSS,Z,N,G,Speed,Heading,HDOP,Altitude,Journey,Runtime,Base ID,State,AD,
Description:	34 is the GPRS code. Refer to Annex 2 for more information.
Example	
GPRS Tx:	@@Q25,353358017784062,A10*6A\r\n

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GPRS Rx:	\$\$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 Set Heartbeat Interval (GPRS) – A11

GPRS Set:	A11,interval
GPRS Get:	A11,OK
Description:	interval = 0, cancel heartbeat (default); interval = [1,65535], set interval in minutes. Heartbeat is recommended to ensure TCP connection when the time interval of tracking is set too long.
Example	
GPRS Tx:	@@S28,353358017784062,A11,10*FD\r\n
GPRS Rx:	\$\$S28,353358017784062,A11,OK*FE\r\n <i>In this example, the below message will be received every 10 minutes</i> \$\$a131,353358017784062,AAA,31,22.913458,114.083183,080229123628,A,9,23,21,83, 1,18,1350,127,0 0 10133 4110,0000,169 181 184 2714 919,*4B

3.3 Track by Time Interval (GPRS) – A12

GPRS Set:	A12,interval,times
GPRS Get:	A12,OK
Description:	interval is in unit of 10 seconds. interval = 0, stop tracking by time interval. Max time interval = 65535*10 seconds times = 0, track by interval continuously; times = [1,65535], set how many times reports will be received from the tracker within the specified time interval.
Example	
GPRS Tx:	@@V29,353358017784062,A12,6,0*33\r\n
GPRS Rx:	\$\$V28,353358017784062,A12,OK*02\r\n <i>In this example, the below message will be received every minute. There is a total of 3 messages to be received.</i> \$\$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 Heading Change Report (GPRS) – A13

GPRS Set:	A13,degree
GPRS Get:	A13,OK
Description:	When the heading direction of the tracker changes over the preset degree, a message with location data will be sent back to the server by GPRS. This ensures a continuous smooth trace.

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	<p>degree = 0, cancel heading change report (default); degree = [1,359], set degree of direction change.</p>
Example	
GPRS Tx:	@@X29,353358017784062,A13,120*37\r\n
GPRS Rx:	<p>\$\$X28,353358017784062,A13,OK*05\r\n</p> <p><i>In this example, the below data will be received when heading changes over 120 degrees.</i></p> <p>\$\$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</p>

3.5 Track by Distance Interval – A14

GPRS Set:	A14,distance
GPRS Get:	A14,OK
Description:	<p>distance = 0, stop tracking by distance interval (default); distance = [1, 4294967295], set interval in meter.</p> <p>If Track by Distance Interval and Time Interval are both set, the GPS location report complies with 'First Reach First Report' rule and the interval for next report is immediately re-calculated.</p>
Example	
GPRS Tx:	@@D30,353358017784062,A14,1000*4A\r\n
GPRS Rx:	<p>\$\$D28,353358017784062,A14,OK*F2\r\n</p> <p><i>In this example, the below message will be received once distance changes over 1000 meters.</i></p> <p>\$\$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</p>

3.6 Track Parking by Time Interval (GPRS)—A15

GPRS Set:	A15, Interval,Times
GPRS Get:	A15,OK
Description:	<p>This command is used for vehicle GPS tracker. Set the time interval, it is better reduce the times of sending GPRS data, to save GPRS rate.</p> <p>After setting A15, A16 will be set automatically. For more details of the engines status(on/off), please refer to A16command as following .</p> <p>Interval is in unit of 10 seconds. Interval = 0, stop tracking by time interval. Max time interval = 65535*10 seconds</p> <p>Times = 0, track by interval continuously (It is used for platform tracking, suggest setting as 0)</p>

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	Times = [1,65535], set how many times reports will be received from the tracker within the specified time interval.
Example	
GPRS Tx:	@@E29,353358017784062,A15,6,0*25\r\n
GPRS Rx:	\$\$E28,353358017784062,A15,OK*F4\r\n

3.7 Track Parking by Time Interval on/off (GPRS)—A16

GPRS Set:	A16,Status														
GPRS Get:	A16,OK														
Description:	<p>This command is used for vehicle GPS tracker. The first positive input (HIGH) of vehicle tracker should connect enginedetection, or the function cannot work. The following are the first positive input of different vehicle tracker:</p> <table border="0"> <thead> <tr> <th>Model</th> <th>First Positive Input</th> </tr> </thead> <tbody> <tr> <td>MVT100</td> <td>Input 2</td> </tr> <tr> <td>MVT340</td> <td>Input 2</td> </tr> <tr> <td>MVT380</td> <td>Input 4</td> </tr> <tr> <td>MVT600</td> <td>Input 3</td> </tr> <tr> <td>T1</td> <td>Input 3</td> </tr> <tr> <td>T3</td> <td>Input 3</td> </tr> </tbody> </table> <p>Status = 1,track parking by time interval works; the GPRS data will be sent by the time interval as below :</p> <p>Engine On : GPRS data will be sent by the time interval of A12</p> <p>Engine Off: GPRS data will be sent by the time interval of A15</p> <p>Status = 0,track parking by time interval close; the GPRS data will be sent by the time interval as below :</p> <p>Engine On : GPRS data will be sent by the time interval of A12</p> <p>Engine Off: GPRS data will be sent by the time interval of A12</p>	Model	First Positive Input	MVT100	Input 2	MVT340	Input 2	MVT380	Input 4	MVT600	Input 3	T1	Input 3	T3	Input 3
Model	First Positive Input														
MVT100	Input 2														
MVT340	Input 2														
MVT380	Input 4														
MVT600	Input 3														
T1	Input 3														
T3	Input 3														
Example															
GPRS Tx:	@@F27,353358017784062,A16,0*C3\r\n														
GPRS Rx:	\$\$F28,353358017784062,A16,OK*F6\r\n														

3.8 Set GPRS – A21

GPRS Set:	A21,X,IP,Port,APN,APN username,APN password
GPRS Get:	A21,OK
Description:	<p>X = 0, close GPRS;</p> <p>X = 1, open TCP;</p> <p>X = 2, open UDP.</p>

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	<p>IP : IP address or domain name, max 32 bytes.</p> <p>Port: max 5 bytes.</p> <p>APN / APN username / APN password: max 32 bytes each.</p> <p>If no username and password required, leave them blank.</p>
Example	
GPRS Tx:	@@H53,353358017784062,A21,1, www.trackingmate.com,8500,CMNET,,*FB\r\n
GPRS Rx:	\$\$H28,353358017784062,A21,OK*F4\r\n

3.9 Set DNS Server IP – A22

GPRS Set:	A22,DNS Server IP
GPRS Get:	A22,OK
Description:	<p>Your server IP is not properly set if the domain name you set by the command A21 doesn't work. You can first use this command to set DNS Server IP (please check with your DNS server provider for the DNS Server IP) and then redo the command A21.</p> <p>DNS Server IP: max 16 bytes</p>
Example	
GPRS Tx:	@@K38,353358017784062,A22,75.127.67.90*FD\r\n
GPRS Rx:	\$\$K28,353358017784062,A22,OK*F8\r\n

3.10 Set Secondary GPRS Server – A23

GPRS Set:	A23,IP,Port
GPRS Get:	A23,OK
Description:	<p>IP : max 32 bytes.</p> <p>Port: max 5 bytes.</p> <p>When the tracker fails to send data to the first server set by command A21, it will send data to the secondary server to avoid losing data.</p>
Example	
GPRS Tx:	@@S43,353358017784062,A23,112.91.12.222,8500*16\r\n
GPRS Rx:	\$\$S28,353358017784062,A23,OK*01\r\n

3.11 Get all Authorized Phone Numbers – A70

GPRS Set:	A70
GPRS Get:	A70,SOS phone number 1,SOS phone number 2,SOS phone number 3,listen-in phone number 1,listen-in phone number 2
Description:	Get all authorized phone numbers.
Example	
GPRS Tx:	@@T25, 353358017784062,A70*93\r\n
GPRS Rx:	\$\$T85,353358017784062,A70,13811111111,13822222222,13833333333,13844444444,

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1385555555*21\r\n

3.12 Authorize Multiple Functions Phone Number – A71

GPRS Set:	A71,phone number 1,phone number 2,phone number 3
GPRS Get:	A71,OK
Description:	<p>Authorize a phone number for SOS alarm, calling for location report, geo-fence alarm, and low battery alarm.</p> <p>Phone Number: 16 charactersMax.</p> <p>If no preset phone number, it is empty (default).</p> <p>When theSOS has been pressed, the tracker will dial the numbers 1, 2, 3. The tracker will stop calling when a number answers.</p>
Example	
GPRS Tx:	@@U61,353358017784062,A71,13811111111,13822222222,13833333333*7D\r\n
GPRS Rx:	\$\$U28,353358017784062,A71,OK*06\r\n

3.13 Set Listen-in (Voice Monitoring) – A72

GPRS Set:	A72,phone number 1,phone number 2
GPRS Get:	A72,OK
Description:	<p>Authorize a phone number to make a silent call to the tracker. The tracker answers the call automatically and allows the caller to listen to what happens around the tracker. There is no voice indication that the call is in progress.</p> <p>Phone Number: Max 2, 16 characters.</p> <p>If no preset phone number, it is empty (default).</p> <p>If no phone number, but reserve comma, the related numberwill be deleted.</p>
Example	
GPRS Tx:	@@V49,353358017784062,A72,13844444444,13855555555*55\r\n
GPRS Rx:	\$\$V28,353358017784062,A72,OK*08\r\n

3.14 Set Sleep Mode – A73

GPRS Set:	A73,level
GPRS Get:	A73,OK
Description:	<p>This setting is for power saving.</p> <p>X=0, turn off sleep mode (default)</p> <p>X=1, normal sleep. GSM module work, GPS module work by sleep mode intermittently. The device can work 25% longer than no sleep mode. Note: this is not recommended for users who set “track by interval” or short time interval, because it will affect the completeness of tracking.</p> <p>X=2, deep sleep, the tracker will enter this mode after it is inactive or stationary(No SOS/any triggered by the button/input/incoming calls/message/movement) for 5 minutes. GPS module stops working and GSM module enters sleep mode. The tracker remains in this mode until it is activated by SOS/any triggered by the button/input/incoming calls/message/movement. After that, it will repeat above</p>

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	<p>processes.</p> <p>Note: MT90 can enter sleep mode under movement, and movement can't wake MT90 from sleep mode.</p> <p>In any condition, the device will directly quit the sleep mode and back to normal working mode by SMS or GPRS command to turn off the sleep mode.</p>
Example	
GPRS Tx:	@@W27,353358017784062,A73,2*D9\r\n
GPRS Rx:	\$\$W28,353358017784062,A73,OK*0A\r\n

3.15 Auto Event Report – AAA

GPRS Get:	AAA,Code, <->yy.dddddd,<->xxx.dddddd,yyymmddHHMMSS,Z,N,G,Speed,Heading,HDOP,Altitude,Journey,Runtime,Base ID,State,AD,
Description:	Unsolicited GPRS event report.
Example	
GPRS Rx:	<i>If SOS button is pressed, the following report will be received.</i> \$\$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

3.16 Delete GPRS Event in Queue Buffer – AFF

GPRS Set:	AFF,delete relevant quantity
GPRS Get:	AFF,sum of balance,Code,<->yy.dddddd,<->xxx.dddddd,yyymmddHHMMSS,Z,N,G,Speed,Heading,HDOP,Altitude,Journey,Runtime,Base ID,State,AD,
Description:	Delete relevant quantity: HEX string and normally is 1. Sum of balance: HEX string. Total number of events in internal flash memory.
Example	
GPRS Tx:	@@h27,353358017784062,AFF,1*0B\r\n
GPRS Rx:	

3.17 Get Authorized Phone Number and SMS Event Flag – B00

GPRS Set:	B00,P
GPRS Get:	B00,P,Phone No,Event Code Flag
Description:	P: 1 to 3. Phone No: max 16 characters. If Phone No is blank, no phone number is authorized. Event Code Flag: 16+8 bytes, HEX String, the first 16 bytes is the sign 1~64 of event code flag, example: SOS Alarm can be sent by SMS (Event 1)0000000000000001; the last 8 bytes is the sign of 65~80 of event code flag, example: SOS and IN2 make call (event code flag 65 and 66),00000003. . See Annex 2 for more details.
Example	
GPRS Tx:	@@H27,353358017784062,B00,1*C0\r\n
GPRS Rx:	\$\$H64,353358017784062,B00,1,13420980279,00000000201C001F00000060*D1\r\n

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3.18 Authorize Phone Number and SMS Event Flag – B01

GPRS Set:	B01, P,phone No,event code
GPRS Get:	B01,OK
Description:	P: 1 to 3. Phone No: max 16 characters. Event Code: If no codes stipulated, then it will apply the default flags to the authorized phone number. See Annex 2 for more details of Event Code and default settings.
Example	
GPRS Tx:	@@Z41,353358017784062,B01,1,13420980279,1*95\r\n
GPRS Rx:	\$\$Z28,353358017784062,B01,OK*05\r\n <i>In this example, once the SOS button is pressed, the following message will be received.</i> 353358017784062,SOS,22.540768,114.077610,100313100055,A,3,21,1,94,5,255,0,381,, 0000,,

3.19 Add SMS Event Flag to Authorized Phone Number – B02

GPRS Set:	B02, P,event code
GPRS Get:	B02,OK
Description:	P : 1 to 3 Event Code: please refer to Annex 2 for more details.
Example	
GPRS Tx:	@@]30,353358017784062,B02,1,17*65\r\n
GPRS Rx:	\$\$]28,353358017784062,B02,OK*09\r\n <i>In this example, the low battery alarm message will be received when the battery is low.</i>

3.20 Delete SMS Event Flag from Authorized Phone Number – B03

GPRS Set:	B03,P,event code
GPRS Get:	B03,OK
Description:	P : 1 to 3 Event Code: please refer to Annex 2 for more details.
Example	
GPRS Tx:	@@F30,353358017784062,B03,1,17*4F\r\n
GPRS Rx:	\$\$F28,353358017784062,B03,OK*F3\r\n <i>This is to cancel the low battery alarm.</i>

3.21 Set Geo-fence Alarm – B05

GPRS Set:	B05,P,latitude,longitude,radius,in,out
GPRS Get:	B05,OK
Description:	P: 1 to 8. Max 8 Geo-fence waypoints can be set.

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	<p>Latitude: Latitude in decimal degrees of the waypoint center. Accurate to 6 digits after the decimal point, add 0 if less than 6 digits, or command will be rejected.</p> <p>Longitude: Longitude in decimal degrees of the waypoint center; Accurate to 6 digits after the decimal point, add 0 if less than 6 digits, or command will be rejected.</p> <p>Radius: [1,4294967295] in meters.</p> <p>In = 0, turn off the alarm when the tracker enters the waypoint;</p> <p>In = 1, turn on the alarm when the tracker enters the waypoint.</p> <p>Out = 0, turn off the alarm when the tracker exits the waypoint;</p> <p>Out = 1, turn on the alarm when the tracker exits the waypoint.</p>
Example	
GPRS Tx:	@@H57,353358017784062,B05,1,22.913191,114.079882,1000,0,1*96\r\n
GPRS Rx:	<p>\$\$H28,353358017784062,B05,OK*F7\r\n</p> <p><i>Once the tracker goes outside of the circle (center: 22.913191, 114.079882 and radius 1000 meters), the following message will be received.</i></p> <p>\$\$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</p>

3.22 Delete Geo-fence Waypoint – B06

GPRS Set:	B06,P
GPRS Get:	B06,OK
Description:	P: 1 to 8. Only one waypoint can be deleted by each SMS/GPRS command.
Example	
GPRS Tx:	@@J27,353358017784062,B06,1*C8\r\n
GPRS Rx:	<p>\$\$J28,353358017784062,B06,OK*FA\r\n</p> <p><i>In this example, the first predefined waypoint is deleted.</i></p>

3.23 Set Speeding Alarm – B07

GPRS Set:	B07, speed
GPRS Get:	B07,OK
Description:	Speed = 0, cancel speeding alarm (default); Speed = [1,255], set speed limit in Km/h.
Example	
GPRS Tx:	@@P28,353358017784062,B07,60*05\r\n
GPRS Rx:	<p>\$\$P28,353358017784062,B07,OK*01\r\n</p> <p><i>In this example, the following message will be received once the tracker's speed is over 60km/h.</i></p> <p>\$\$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</p>

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3.24 Set Tow Alarm – B08

GPRS Set:	B08,time
GPRS Get:	B08,OK
Description:	<p>When the tracker moves or trembles over the preset time, it will report to the server. The sleep mode should be preset as level 2 through command A73 and the value of "Tremble Time" be set through command B08 before using the tow alarm, otherwise the alarm set doesn't work.</p> <p>time = 0, cancel tow alarm (default); time = [1,255], set period in second.</p>
Example	
GPRS Tx:	@@I27,353358017784062,B08,3*CB\r\n
GPRS Rx:	\$\$I28,353358017784062,B08,OK*FB\r\n
	<p>In this example, when the tracker moves or trembles for over 3 seconds, the following message will be received.</p> <pre>\$\$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</pre>

3.25 Set Tremble Sensitivity (MVT100/MVT340/MVT380/T1/T3) – B09

GPRS Set:	B09,sensitivity
GPRS Get:	B09,OK
Description:	<p>Sensitivity = [1,65535], set sensitivitygrade for tremble sensor.</p> <p>The tremble sensor is more sensitive if the grade is lower.</p> <p>Defaulted as 1.</p>
Example	
GPRS Tx:	@@C28,353358017784062,B09,10*F5\r\n
GPRS Rx:	\$\$C28,353358017784062,B09,OK*F6\r\n

3.26 Set TrembleSensitivity (MVT600) – B20

GPRS Set:	B20,sensitivity
GPRS Get:	B20,OK
Description:	Sensitivity = [1,65535], set sensitivitygrade for tremble sensor.
Example	
GPRS Tx:	@@B28,353358017784062,B20,10*ED\r\n
GPRS Rx:	\$\$B28,353358017784062,B20,OK*EE\r\n

3.27 Set Anti-theft – B21

GPRS Set	B21,Status
GPRS Get	B21, OK
Description:	<p>Status =1, set anti-theft successfully (default); The device of MVT series will alarm when the first negative input and the first positive input are active except SOS.</p> <p>Status = 0, cancel anti-theft; The device of MVT series will not alarm when the first</p>

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negative input and the first positive input are active except SOS.

Note: this function is only applied in vehicles trackers of MVT series. The relations between inputs are as follows:

Model	Negative Input	Positive Input
MVT100	-	Input 2
MVT340	-	Input 2
MVT380	Input 2	Input 4
MVT600	Input 2	Input 3
T1/T3	Input 2	Input 3

Example

GPRS Tx: @@C27,353358017784062,B21,1*BE\r\n

GPRS Rx: \$\$C28,353358017784062,B21,OK*F0\r\n

3.28 Set Extended Functions – B31

GPRS Set:	B31,AB
GPRS Get:	B31,OK
Description:	A=0, all LED lights work normally (default); A=1, all LED lights are off when the tracker is working; B, reserved.
Example	
GPRS Tx:	@@J28,353358017784062,B31,10*F7\r\n
GPRS Rx:	\$\$J28,353358017784062,B31,OK*F8\r\n

3.29 Set Log Interval – B34

GPRS Set:	B34,interval
GPRS Get:	B34,OK
Description:	Set the interval for storing valid GPS data into tracker's flash memory. interval = 0, turn off logging (default); interval = [1,65535], set logging interval in second.
Example	
GPRS Tx:	@@N28,353358017784062,B34,60*03\r\n
GPRS Rx:	\$\$N28,353358017784062,B34,OK*FF\r\n

3.30 Time Zone Setting (for SMS Report) – B35

GPRS Set:	B35,minute
GPRS Get:	B35,OK
Description:	Default time of the tracker is GMT. You can use this command to correct it to your local time for SMS report. minute = 0, GMT (default); minute = [-32768,32767], set time difference in minutes to GMT. Time zone for SMS is separate from GPRS.
Example	

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GPRS Tx:	@@O29,353358017784062,B35,480*3C\r\n
GPRS Rx:	\$\$O28,353358017784062,B35,OK*01\r\n
	<i>In this example, time zone of the device is set as GMT +8.</i>

3.31 Time Zone Setting (for GPRS Report) – B36

GPRS Set:	B36,GPRS minute
GPRS Get:	B36,OK
Description:	minute = 0, GMT (default);Note: MS02 will automatically recognize the user's time zone from computer system. Please don't change GPRS time zone, and remain the device's default GPRS time zone as 0. If changed, it may occur discrepancy between the tracking time and the actual time. minute = [-32768,32767], set time difference in minutes to GMT.
Example	
GPRS Tx:	@@P29,353358017784062,B36,480*3E\r\n
GPRS Rx:	\$\$P28,353358017784062,B36,OK*03\r\n
	<i>In this example, time zone of the device is set as GMT +8.</i>

3.32 Set SMS Header for Event – B91

GPRS Set:	B91,event code, header
GPRS Get:	B91,OK
Description:	Header: max 16 bytes. Please refer to Annex 2 for more details
Example	
GPRS Tx:	@@R31,353358017784062,B91,1,SOS*F0\r\n
GPRS Rx:	\$\$R28,353358017784062,B91,OK*06\r\n
	<i>After pressing the SOS button (input1), it shows 'SOS' in the beginning of the alarm message.</i>

3.33 Set Event Flag for GPRS Report – B92

GPRS Set:	B92,GPRS event code flag
GPRS Get:	B92,OK
Description:	Set one or more event flag to the GPRS report. Please refer to Annex 2 for more details of the Event Code. Default authorized codes are stipulated in Annex 2. GPRS Event Flag: 16 hexstring for max. 64 events (64bits event flag). MSB(bit63)=1 means the 64 th event is enabled in GPRS report; MSB(bit63)=0 means the 64 th event is disabled in GPRS report. LSB(bit0)=1 means the 1 st event (SOS) is enabled in GPRS report; LSB(bit0)=0 means the 1 st event (SOS) is disabled in GPRS report.
Example	

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GPRS Tx:	@@q42,353358017784062,B92,1234567890ABCDEF*62\r\n
GPRS Rx:	\$\$q28,353358017784062,B92,OK*26\r\n

3.34 Get Event Flag of GPRS Report – B93

GPRS Set:	B93
GPRS Get:	B93,GPRSevent code flag
Description:	Read the preset event code of GPRS report.
Example	
GPRS Tx:	@@V25,353358017784062,B93*7B\r\n
GPRS Rx:	\$\$V42,353358017784062,B93,00000007E01C001F*B5\r\n

3.35 Set Event Flag for Taking Picture –B96

GPRS Set:	B96,event code flag
GPRS Get:	B96,OK
Description:	Set one or more events to take a picture. Once each event is activated, the camera takes a picture and stores it in its SD card memory. In default mode, once the SOS button is pressed, the tracker will automatically take a picture and store it in its SD card memory. Please refer to Annex 2 for more details of the Event Code. Use command D00/D01 to get pictures.
Example	
GPRS Tx:	@@A42,353358017784062,B96,0000000000000001*95\r\n
GPRS Rx:	\$\$A28,353358017784062,B96,OK*FA\r\n

3.36 Get Event Flag of Taking Picture–B97

GPRS Set:	B97
GPRS Get:	B97,event flag
Description:	To know which event(s) have enabled the function of taking pictures.
Example	
GPRS Tx:	@@C25,353358017784062,B97*6C\r\n
GPRS Rx:	\$\$C42,353358017784062,B97,0000000000000001*60\r\n

3.37 Output Control – C01

GPRS Set:	C01,speed,ABCDE
GPRS Get:	C01,OK
Description:	Speed = 0, no speed limit Speed = [1,255], in km/h, set conditional speed limit for output control. When speed is below the set speed, output is activated. 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;

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	<p>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.</p>
Example	
GPRS Tx:	@@M34,353358017784062,C01,20,10122*18\r\n
GPRS Rx:	\$\$M28,353358017784062,C01,OK*F9\r\n

3.38 Protocol Control – C03

GPRS Set:	C03, X
GPRS Get:	C03,OK
Description:	X = 0, Auto Event Report (default); X = 1, Event report needs server's confirmation by AFF command.
Example	
GPRS Tx:	@@f27,353358017784062,C03,0*E1\r\n
GPRS Rx:	\$\$f28,353358017784062,C03,OK*14\r\n

3.39 GPRSCache Data Sending Model– C04

GPRS Set:	C04,X
GPRS Get:	IMEI,C04,OK
Description:	X = 0, FIFOFirst In First OutModel (default) , data is line up the way storage X = 1, FILOFirst In Last Out Model , data storage to the heap-line
Example	
GPRS Tx:	@@g27,353358017784062,C04,1*E4\r\n
GPRS Rx:	\$\$g28,353358017784062,C04,OK*16\r\n

3.40 GPRS Message Display– C13

GPRS set	C13,level,type,content
GPRS get	C13,OK
Description	<p>To show message sent from platform on the LCD screen</p> <p>Level: 0 = normal message, 1 = urgent message</p> <p>Type: coding mode. E=ASCII, U=UNICODE2</p> <p>Content: message content, maximal 140 bytes. If it's ASCII, then it directly show characters, if Unicode, it is hexadecimal. Both Chinese and English are supporttable.</p>
Example	

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GPRS Tx:	@@C47,353358017784062,C13,1,GPRS,E,Test Message*49\r\n
GPRS Rx:	\$\$C28,353358017784062,C13,OK*EF\r\n

3.41 Register the Index Numbers of Temperature Sensors (GPRS) – C40

GPRS set	C40,SN1 & index1,SN2 & index2,...,SN(n) & index(n)
GPRS get	C40,SN1 & index1 & result,SN2 & index2 & result,... SN(n) & index(n) & result(n)
Description	<p>From C40 to C46, total 7 commands are for reading and configuring the temperature sensor.</p> <p>Installation steps:</p> <ol style="list-style-type: none"> 1) Check AAA GPRS data whether contains temperature sensor index=0 or not. 2) Fail to index if index No. is still 0.Please send C42 command to read sensor SN and index No. list. 3) Use C40 to index the sensors, and establish corresponding relationship in the database for easily searching from platform, example: save IMEI, SN, Index, Self-definedName, etc. 4) If High/Low Temperature Alarm required, send C43 command to configure temperature value and self-defined name. Suggest use the place where to install the sensor as self-defined name and store it in the database. 5) If the sensor is changed or pulled out, when the device online, please send C46 command to validate the sensor. If not match, use C40 and C43 to configure. <p>Device will upload temperature data in AAA GPRS event, if any index in temperature data is 0,it means this sensor still need to be indexed. Platform will send C42 automatically to get temperature sensor's SN and index list. Find out sensor of index 0 and register it.</p> <p>n. Max. 8</p> <p>SN:unique serial number of the temperature sensor, 8 byte Hex. Displayed on Platform like 28 1B D5 23 04 00 00 57, which is the same as SN indicated on the sensor's label.</p> <p>Index: 1 byte Hex.From 1 to 254</p> <p>Register Result: 0x01-success, 0x02-SN exist, 0x03-fully registered, 0x04-fail to register. all in Hex.</p>
Example (sample data was converted from Hex to ASCII for example purpose; actual data is in Hex)	
GPRS Tx:	@@q35,012896001078259,C40,(1BD5#040000W02*50\r\n
GPRS Rx:	\$\$q36,012896001078259,C40,(1BD5#040000W0201*1B\r\n

3.42 Delete Registered Temperature Sensor (GPRS) – C41

GPRS set	C41,index1, index2,...index(n)
GPRS get	C41,index1,result,index2,result,.....index(n),result
Description	<p>Index no: registered sensor, in Hex, from 1 to 254.</p> <p>Result: (Decimal): 1-success, 2-non-registered,3-Fail to delete due to other reason;</p> <p>To delete all registered temperature sensors, sendcommand C41 only, will reply OK if succeed, or reply Error if failed)</p>

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Example	
GPRS Tx:	@@n28,012896001078259,C41,01*19\r\n
GPRS Rx:	\$\$n30,012896001078259,C41,01,1*37\r\n

3.43 Read Temperature Sensor SN and Index No. (GPRS) – C42

GPRS set	C42
GPRS get	C42,SN1&index1,SN2& index2,...SN(n) & index(n)
Description	SN(n) : the (n)th sensor's SN, 8 bytes in Hex. Index(n) : the (n)th sensor's index, 1 byte in Hex. Range 0~255 , 0 means non-registered sensor
Example:	
GPRS Tx:	@@m25,012896001078259,C42*89\r\n
GPRS Rx:	\$\$t45,012896001078259,C42,(B4v#040000R00,(1BD5#040000W00*13\r\n

3.44 Set Temperature Value for High/Low Temperature Alert and Logical Name (GPRS) – C43

GPRS set	C43,index1/SN1/High1/Low1/HighAlert1/LowAlert1/LogicalName1/... Index(n)/SN(n)/High(n)/Low(n)/HighAlert(n)/LowAlert(n)/LogicalName(n)
GPRS get	C43,index1/result1/Index2/result2../Index(n)/result(n)
Description	n :Max. 8 Index : 1 byte in Hex. SN : unique serial number of the temperature sensor, 8 bytes in Hex. High and Low Temperature Value :2 bytes in Hex.The first byte is value's integer part. High bit=1,represents negative integer, high bit=0, represents positive integer.The second byte is value's decimal part. High Temperature Alert :1 byte in Hex. Low Temperature Alert :1 byte in Hex. Logical Name (Self-defined name) : 16 bytes in Hex. Filled with 0x00 if it is shorter than 16 bytes. Equal to 15 English characters (must set aside a byte at the end of string for character of "#" to distinguish the Unicode and English character. Result : (1 byte in Hex) 0x01-succeeded, 0x02-Non-registered, 0x03-Failed to set due to wrong parameters etc. Note: there are no separator symbol "/" between parameters.
Example: (sample data was converted from Hex to ASCII for example purpose; actual data is in Hex)	
GPRS Tx:	@@o57,012896001078259,C43,01(1BD5#040000W<0005000101T1#0000000000000000 0000000000*3F
GPRS Rx:	\$\$o28,012896001078259,C43,0101*85

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3.47 Check Temperature Sensor Parameters (GPRS) – C46

GPRS set	C46
GPRS get	C46, Checksum
Description	Checksum: 2 bytes in Hex, use CRC-CCITT to calculate related parameters of 8 temperature sensors (in order: Index, SN, High Temperature Value, Low Temperature Value, High Temperature Alert, Low Temperature Alert, Logical Name).The result will be used as checksum for temperature.
Example:	
GPRS Tx:	@@i25,012896001078259,C46*89\r\n
GPRS Rx:	\$\$i28,012896001078259,C46,12_*F1\r\n

3.48 Get Picture – D00

GPRS Set:	D00,file name,index1
GPRS Get:	D00, file name,total,index2,data
Description:	Before getting pictures from the tracker, use command D01 to get picture list and picture names. File Name: The file name of the picture you want to get from tracker's SD card memory. Index1: The starting sequence number of the picture package. Min = 0 (one picture will be split into a number of packages). Total: Total number of the packages for each picture. Min = 1. Index2: The current sequence number of picture package getting from the tracker. Data: Picture data of each package. Hex code. A full picture is composed when all packages are received in the server.
Example	
GPRS Tx:	@@O48,353358017784062,D00,0215080432_C2E03.jpg,0*DB\r\n
GPRS Rx:	\r\n

3.49 Get Picture List– D01

GPRS Set:	D01,index1
GPRS Get:	D01,total,index2,file(1) file(2) ...file(n)
Description:	File(n): File name of the pictures separated by ' '. Index1: Starting sequence number of the picture list. Min = 0. For example, if Index1 = 0, the file names received will start from the 1st picture list and if Index1 = 4, the file name will start from the 5th picture list. Total: Total number of picture lists. Min = 0. Index2: Current sequence number of the picture list from the tracker.
Example	
GPRS Tx:	@@A27,353358017784062,D01,0*BB\r\n
GPRS Rx:	\$\$A480,353358017784062,D01,3,0,0506162517_C1E03.jpg 0506162517_C1E11.jpg 0506162624_C1E03.jpg 0506162630_C1E11.jpg 0506162720_C1E03.jpg 0506162721_C1

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E03.jpg|0215080547_C1E03.jpg|0215080547_C1E11.jpg|0215080626_C1E03.jpg|0215080626_C1E11.jpg|0215080827_C1E03.jpg|0215080827_C1E11.jpg|0215080850_C1E03.jpg|0215080850_C1E11.jpg|0507145426_C1E03.jpg|0507145426_C1E11.jpg|0507145512_C2E03.jpg|0507145512_C2E11.jpg|0215080050_C3E03.jpg|0215080050_C3E11.jpg|0215080459_C3E03.jpg|021508050*41\r\n

3.50 Delete Picture – D02

GPRS Set:	D02, file(1) file(2) ...file(n)
GPRS Get:	D02,OK
Description:	File(n): File name of picture(s) you want to delete, separated by ' ’.
Example	
GPRS Tx:	@@E110,353358017784062,D02,0506162517_C1E03.jpg 0506162517_C1E11.jpg 0506162624_C1E03.jpg 0506162630_C1E11.jpg *4E\r\n
GPRS Rx:	\$\$F28,353358017784062,D02,OK*F4\r\n

3.51 Take One Picture– D03

GPRS Set:	D03,index,file name
GPRS Get:	D03, OK
Description:	Index: camera number. Min = 1 and normally Max = 2. File Name: The file name of the picture.
Example	
GPRS Tx:	@@D46,353358017784062,D03,1,camera picture.jpg*E2\r\n
GPRS Rx:	\$\$D28,353358017784062,D03,OK*F3\r\n

3.52 Set Accelerated Speed of Rush Decelerate Alarm (OBD)–D30

GPRS Set:	D30,accelerated speed
GPRS Get:	D30, OK
Description:	Unit: m/s^2 Value: [0,255] =0 cancel rush decelerate, default 0.
Example	
GPRS Tx:	@@\$28,353358017784062,D30,10*FD\r\n
GPRS Rx:	\$\$S28,353358017784062,D30,OK*FE\r\n

3.53 Set Accelerated Speed of Rush Accelerate Alarm (OBD) – D31

GPRS Set:	D31,accelerated speed
GPRS Get:	D31, OK
Description:	Unit: m/s^2 Value: [0,255], =0 cancel rush accelerate, default 0.
Example	

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GPRS Tx:	@@V29,353358017784062, D31,10*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D31,OK*02\r\n

3.54 Set RPM Value of RPM Over Speed Alarm (OBD)–D32

GPRS Set:	D32,RPM
GPRS Get:	D32,OK
Description:	Unit: RPM Value: [0,65535], =0 cancel RPM Over Speed Alarm, default 0.
Example	
GPRS Tx:	@@V29,353358017784062, D32,3000*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D32,OK*02\r\n

3.55 Set Temperature of Engine Overheat Alarm (OBD)–D33

GPRS Set:	D33,temperature
GPRS Get:	D33,OK
Description:	Unit: degC Value: [0,255], =0 cancel Engine Overheat Alarm, default 0.
Example	
GPRS Tx:	@@V29,353358017784062, D33,110*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D33,OK*02\r\n

3.56 Set Time of Ignition on when Parking Overtime Alarm (OBD)–D34

GPRS Set:	D34,time
GPRS Get:	D34,OK
Description:	Unit: second, Value: [0,65535] =0 cancel Alarm, default 0. Overtime T is defined from speed=0 and RPM≠ 0.
Example	
GPRS Tx:	@@V29,353358017784062, D34,30*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D34,OK*02\r\n

3.57 Set Time of Fatigue Driving Alarm (OBD)–D35

GPRS Set:	D35,time
GPRS Get:	D35,OK

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Description:	Unit: min, Value: [0,65535], =0 cancel Fatigue Driving Alarm, default 0. Driving Time Accumulation as per RPM≠ 0. Stop the engine and rest for time (T), it will be accumulated from 0, T is set by D36.
Example	
GPRS Tx:	@@V29,353358017784062, D35,180*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D35,OK*02\r\n

3.58 Set Rest Time after Fatigue Driving (OBD)–D36

GPRS Set:	D36,time
GPRS Get:	D36,OK
Description:	Unit: min, Value: [0, 65535], =0 can't quit from Fatigue Driving Status after fatigue driving alarm, default 0. Rest Time: RPM=0, engine stop. RPM≠ 0, rest time is 0. Rest over preset time, driving time becomes 0.
Example	
GPRS Tx:	@@V29,353358017784062, D36,180*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D36,OK*02\r\n

3.59 Set Journey and Running Time of Maintenance Reminder (OBD)–D37

GPRS Set:	D37,journey,time
GPRS Get:	D37,OK
Description:	Unit of Journey: meter, values: [0, 4294967295] Unit of Time: second, values: [0, 4294967295] Journey and time = 0, the Maintenance Reminder will be canceled. The Maintenance Reminder will be activated when journey and time reach preset value. Journey is calculated from OBD data if TC68 could read them, meanwhile, running time is accumulated. Otherwise, they are calculated from GPS data
Example	
GPRS Tx:	@@V29,353358017784062, D37,10000000,1000000*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D37,OK*02\r\n

3.60 OBD Snapshot (OBD)–D39

GPRS Set:	D39
GPRS Get:	D39,dynamic dataflow
Description:	Upload all dataflow by Transparent Transfer. The server analyses data according to

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	dynamic dataflow PID. Dynamic dataflow PID will be uploaded for one time when TC68 connected. (To save RAM of the platform, we do not suggest users save the PID of each device. PID would not upload automatically, please send command to read it if needed.)
Example	
GPRS Tx:	@@V29,353358017784062, D39*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D39,...*02\r\n

3.61 Read PID (OBD)–D40

GPRS Set:	D40
GPRS Get:	D40, dynamic dataflow PID
Description:	Upload all dataflow PID by Transparent Transfer. Dynamic dataflow PID can be read by command via platform. Dynamic dataflow will be uploaded for one time when TC68 is connected. (please select non-automatically upload)
Example	
GPRS Tx:	@@V29,353358017784062, D40*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D40,...*02\r\n

3.62 Read Freeze Frame PID (OBD)–D41

GPRS Set:	D41
GPRS Get:	D41, freeze frame PID
Description:	Upload freeze frame PID by Transparent Transfer. Freeze frame PID can be read by command via platform. Freeze frame PID will be uploaded for one time when TC68 is connected. (please select non-automatically upload)
Example	
GPRS Tx:	@@V29,353358017784062, D41*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D41,...*02\r\n

3.63 Read Fault Code (OBD)–D42

GPRS Set:	D42
GPRS Get:	D42, fault code
Description:	Fault code: 2 bytes for each fault code, the first byte is high byte; the second byte is low byte.
Example	
GPRS Tx:	@@V29,353358017784062, D42*33\r\n

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GPRS Rx:	\$\$V28,353358017784062,D42,...*02\r\n
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3.64 Read Data of Freeze Frame (OBD)–D43

GPRS Set:	D43
GPRS Get:	D43,data of freeze frame
Description:	Upload data of freeze frame by Transparent Transfer. The device will upload the fault code first, freeze frame follows. Data of freeze frame can be read by command via platform.
Example	
GPRS Tx:	@@V29,353358017784062, D43*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D43,...*02\r\n

3.65 Clear Fault Code (OBD)–D44

GPRS Set:	D44
GPRS Get:	D44,OK
Description:	Clear the fault code of ECU
Example	
GPRS Tx:	@@V29,353358017784062, D44*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D44,OK*02\r\n

3.66 Read Ready Status (OBD)–D45

GPRS Set:	D45
GPRS Get:	D45,status
Description:	The status is 4 bytes If Ready Status Alarm activated, device will upload data to the server automatically when status is abnormal. You also can send D45 command from the server to read the status for one time.
Example	
GPRS Tx:	@@V29,353358017784062, D45*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D45,...*02\r\n

3.67 Transmit SMS Text from Platform (OBD)–D46

GPRS Set:	D46,mobile phone number,SMS format,SMS text
GPRS Get:	D46,OK
Description:	Mobile Phone Number: the device will send SMS to this number, max 16 bytes. SMS Format: =0, text; =1 Unicode

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Example	
GPRS Tx:	@@V29,353358017784062, D46,...*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D46,OK*02\r\n

3.68 Set VIN (OBD)–D47

GPRS Set:	D47,VIN
GPRS Get:	D47,OK
Description:	VIN is the identification code of vehicle, 17 characters Configure VIN when the device can't read vehicle's VIN. It will be covered when the device read the VIN.
Example	
GPRS Tx:	@@V29,353358017784062, D47,1234567890ASDFGHJ*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D47,OK*02\r\n

3.69 Read VIN (OBD)–D48

GPRS Set:	D48
GPRS Get:	D48,VIN
Description:	VIN is the identification code of vehicle, 17 characters
Example	
GPRS Tx:	@@V29,353358017784062, D48*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D48,1234567890ASDFGHJ *02\r\n

3.70 Set Vehicle Model (OBD)–D49

GPRS Set:	D49,vehicle model
GPRS Get:	D49,OK
Description:	In the same fault code, fault content may be different from vehicle's models. Default 0 Model: OBD: 0 FORD:1 GM: 2 CHRYSLER: 3 BENZ: 4 BMW: 5 VW: 6 PORSCHE: 7 JAGUAR: 8 VOLVO: 9 OPEL: 10

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	SAAB: 11 TOYOTA: 12 HONDA: 13 NISSAN: 14 MITSUBISH: 15 MAZDA: 16 SUBARU: 17 SUZUKI: 18 ISUZU: 19 HYUNDAI: 20 KIA: 21 LAND_ROVER: 22 LEXUS: 23 Protocol Keep: 24 ROVER: 25 CITROEN: 26 DAEWOO: 27 DAIHATSU: 28 FIAT: 29
Example	
GPRS Tx:	@@V29,353358017784062, D49,2*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D49,OK*02\r\n

3.71 Read Vehicle Model (OBD)–D50

GPRS Set:	D50
GPRS Get:	D50, vehicle model
Description:	In the same fault code, fault content may be different from vehicle's models. Vehicle Model: see command D49
Example	
GPRS Tx:	@@V29,353358017784062, D50*33\r\n
GPRS Rx:	\$\$V28,353358017784062, D50,2*02\r\n

3.72 Set Vehicle On-board Diagnostics (OBD)–D51

GPRS Set:	D51,flag
GPRS Get:	D51,OK
Description:	Flag=0, inactivate, default 0 Flag=1, activate 3 requirements for On-board diagnostics: 1. engine start ; 2. idle speed; 3. water temperature between 85~106 °C.

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	Activate the function, start engine, check if the engine meet the 3 requirements, it will diagnostics automatically.
Example	
GPRS Tx:	@@V29,353358017784062, D51,1*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D51,OK*02\r\n

3.73 Set Reference Value of On-board Diagnostics Parameters (OBD)–D52

GPRS Set:	D52,1,xx,yy,2,xx,yy,3,xx,yy...
GPRS Get:	D52,OK
Description:	<p>xx: lower limit value; yy:upper limit value</p> <p>Only below 18 items are included:</p> <ol style="list-style-type: none"> 1. Engine Load Calculation,0 100,20 50", "%" 2. Reserved, can't configure 3. Short-term Fuel Correction(Cylinder Block Group 1) ,-20 20,-10 10", "%" 4. Long-term Fuel Correction(Cylinder Block Group 1) ,-20 20,-10 10", "%" 5. Short-term Fuel Correction(Cylinder Block Group 2) ,-20 20,-10 10", "%" 6. Long-term Fuel Correction(Cylinder Block Group 2) ,-20 20,-10 10", "%" 7. Oil Pressure,0 765,4.5 5.5", "kPa" 8. Intake AirPressure,0 100,29 48", "Kpa" 9. Engine REV,0 6500,600 1000", "Rpm" 10. Reserved, can't configure 11. Ignition Advance Angle,0 30,10 14", "deg" 12. Intake Air Temperature,0 80,10 60", "degC" 13. Air Flow,0 30,3 6", "g/s" 14. ThrottlePosition,0 100,0 5", "%" 15. Reserved, can't configure 16. Vapor Pressure,-1832 8192", "Pa" 17. Atmospheric Pressure,0 110,60 102", "kpa" 18. Battery Voltage,0 15,12 13.6", "V"
Example	
GPRS Tx:	@@V29,353358017784062, D52,1,2,20,2,85,105*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D52,OK*02\r\n

3.74 Set GPRS Flag of OBD Event (OBD)–D53

GPRS Set:	D53,flag
GPRS Get:	D53,OK
Description:	<p>Configure single or multiple GPRS flag of OBD event</p> <p>For more details, please see the above 1.4 Event Code</p> <p>GPRS Event Flag: 32 HEX characters (16bytes), 128bits.</p>

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	Low byte is No. 129 event(Rush Decelerate Alarm)flag (bit0) High byte is No.129+127 event flag (bit127)
Example	
GPRS Tx:	@@V29,353358017784062, D53,12345678901234567890123456789012*33\r\n
GPRS Rx:	\$\$V28,353358017784062, D53,OK*02\r\n

3.75 Read GPRS Flag of OBD Event (OBD)–D54

GPRS Set:	D54
GPRS Get:	D54,Flag
Description:	Read GPRS flag of OBD event
Example	
GPRS Tx:	@@V29,353358017784062, D54*33\r\n
GPRS Rx:	\$\$V28,353358017784062, D54, 12345678901234567890123456789012*02\r\n

3.76 Set Authorized Phone Numbers and SMS Event Flag (OBD)–D55

GPRS Set:	D55, place,mobile phone number,event code
GPRS Get:	D55,OK
Description:	Place: character 1~3, No.1, 2, 3 authorized phone number. Mobile Phone Number: max 16 characters. default empty Event Code Flag: 32byte, 16 HEX characters format Event Code: For more details, see OBD Event Code
Example	
GPRS Tx:	@@V29,353358017784062, D55,1,13420980279,129*33\r\n
GPRS Rx:	\$\$V28,353358017784062, D55,OK*02\r\n

3.77 Read Authorized Phone Numbers and SMS Event Flag (OBD)–D56

GPRS Set:	D56,place
GPRS Get:	D56,place,mobile phone number,event code
Description:	Place: character 1~3, No.1,2,3 authorized phone number. Mobile Phone Number: max 16 characters. default empty Event Code Flag: 32byte, 16 HEX characters format Event Code: For more details, see OBD Event Code
Example	
GPRS Tx:	@@V29,353358017784062, D56,1*33\r\n
GPRS Rx:	\$\$V28,353358017784062, D56,1,13420980279,456700000000201C001F00000060DEB6*02\r\n

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3.78 Add SMS Event Flag to Authorized Phone Number (OBD) –D57

GPRS Set:	D57,place,event code
GPRS Get:	D57,OK
Description:	Place: character 1~3, No.1, 2,3 authorized phone number Event Code: For more details, see OBD Event Code
Example	
GPRS Tx:	@@]30,353358017784062, D57,1,130*65\r\n
GPRS Rx:	\$\$]28,353358017784062, D57,OK*09\r\n

3.79 Delete Authorized Phone Numbers and SMS Event Flag (OBD) –D58

GPRS Set:	D58,place,event code
GPRS Get:	D58,OK
Description:	Place: character 1~3, No.1,2,3 authorized phone number Event Code: For more details, see OBD Event Code
Example	
GPRS Tx:	@@]30,353358017784062, D58,1,130*65\r\n
GPRS Rx:	\$\$]28,353358017784062, D58,OK*09\r\n

3.80 Set OBD SMS Event Characters (OBD) –D59

GPRS Set:	D59,SMS event code,SMS heading
GPRS Get:	D59,OK
Description:	Heading Content: max 16 bytes For more details, see OBD Event Code
Example	
GPRS Tx:	@@R31,353358017784062, D59,129,SpeedUp*F0\r\n
GPRS Rx:	\$\$R28,353358017784062, D59,OK*06\r\n

3.81 Set Buzzer Flag of Event Alarm (OBD) –D60

GPRS Set:	D60,buzzer flag
GPRS Get:	D60,OK
Description:	Buzzer alarm flag: 64 HEX characters (32 Bytes), 256bits Low byte(bit0): the first event (SOS) flag (bit128): the 129 th event (Rush Decelerate Alarm)flag For details of event flag, see 1.4 Event Code
Example	
GPRS Tx:	@@V29,353358017784062, D60,1234567890123456789012345678901212345678901234567890123456789012*33 \r\n

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GPRS Rx:	\$\$V28,353358017784062, D60,OK*02\r\n
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3.82 Read Buzzer Flag of Event Alarm (OBD) –D61

GPRS Set:	D61
GPRS Get:	D61, buzzer alarm flag
Description:	Buzzer alarm flag: 64 HEX characters (32 Bytes), 256bits Low byte(bit0): the first event (SOS) flag (bit128): the 129 th event (Rush Decelerate Alarm)flag For details of event flag, see 1.4 Event Code
Example	
GPRS Tx:	@@V29,353358017784062, D61*33\r\n
GPRS Rx:	\$\$V28,353358017784062, D61,12345678901234567890123456789012123456789012345678901234567890123456789012*02 \r\n

3.83 Set Percentage of Low Fuel Alarm (OBD) –D63

GPRS Set:	D63,percentage
GPRS Get:	D63,OK
Description:	Unit: %, Value [0,100], =0 cancel Low Fuel Alarm, default 0
Example	
GPRS Tx:	@@V29,353358017784062, D63,30*33\r\n
GPRS Rx:	\$\$V28,353358017784062,D63,OK*02\r\n

3.84 Get Firmware Version and SN – E91

GPRS Set:	E91
GPRS Get:	E91,version,SN
Description:	Get current firmware version and S/N details of the tracker.
Example	
GPRS Tx:	@@W25,353358017784062,E91*7D\r\n
GPRS Rx:	\$\$W38,353358017784062,FWV1.00,12345678*1C\r\n

3.85 Reboot GSM Module – F01

GPRS Set:	F01
GPRS Get:	F01,OK
Description:	Reboot GSM module.
Example	
GPRS Tx:	@@j25,353358017784062,F01*88\r\n
GPRS Rx:	\$\$j28,353358017784062,F01,OK*19\r\n

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3.86 Reboot GPS Module – F02

GPRS Set:	F02
GPRS Get:	F02,OK
Description:	Reboot GPS Module.
Example	
GPRS Tx:	@@Z25,353358017784062,F02*79\r\n
GPRS Rx:	\$\$Z28,353358017784062,F02,OK*0A\r\n

3.87 Clear Journey and Running Time – F06

GPRS Set:	F06,X
GPRS Get:	F06,OK
Description:	Clear Journey and Running Time. X=1, clear journey X=2, clear running time X=3, clear journey and running time
Example	
GPRS Tx:	@@D27,353358017784062,F06,1*C6\r\n
GPRS Rx:	\$\$D28,353358017784062,F06,OK*F8\r\n

3.88 Set Mileage and Running Time - F08

GPRS Set	F08, Running Time, Mileage
GPRS Get	F08,OK
Description:	Running Time : [0, 4294967295] , decimalism format, units in meters , null won't be set. Mileage : [0, 4294967295] , decimalism format, units in meters , null won't be set.
Example	
GPRS Tx:	@@D40,353358017784062,F08,0,4825000*51\r\n
GPRS Rx:	\$\$D28,353358017784062,F08,OK*FA\r\n

3.89 Delete SMS/GPRS Buffer – F09

GPRS Set:	F09,X
GPRS Get:	F09,OK
Description:	X=1, delete SMS buffer X=2, delete GPRS buffer X=3, delete SMS and GPRS buffer
Example	
GPRS Tx:	@@E27,353358017784062,F09,1*CA\r\n
GPRS Rx:	\$\$E28,353358017784062,F09,OK*FC\r\n

3.90 Initialization– F11

GPRS Set:	F11
GPRS Get:	F11,OK
Description:	Set all parameters, except for the password, back to factory default.



File Name:	MEITRACK GPRS Protocol	Creator:	Cavana Cheung
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Sub Project:	GPRS Protocol	Page:	45 of 21
Revision:	V1.6	Confidential:	Internal Documentation

Example	
GPRS Tx:	@@[25,353358017784062,F11*7A\r\n
GPRS Rx:	\$\$[28,353358017784062,F11,OK*0B\r\n

If you have any questions, please send e-mail to info@meitrack.com. We are here to help you.