FIFOTRACK COMMAND LIST

Model: R18

Version: V1.1

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Document History

Version	Revision Date	Author	Detail
V1.1	Aug 8, 2024	Vito Hu	Initial Version

Contents

1 Applied Module

- R18

2 GPRS Command Format

GPRS uplink (i.e.: Data is sent from tracker to platform) command format:

$$<pack-len>,<ID>,<work-no>,<cmd-code>,<cmd-para>*<checksum>\r\n

GPRS downlink (i.e.: Data is sent form platform to tracker) command format:

##<pack-len>,<ID>,<work-no>,<cmd-code>,<cmd-para>*<checksum>\r\n

Remarks:

- Comma (,) is used to separate data fields, and it is necessary. There is no space before or after comma.
- pack-len: Package Length, decimal string format, the field of *pack-len* is {,*<ID>,<work-no>,<cmd-code>,<cmd-para>*}, be careful, comma(,) in front of *ID* included.
- ID: Tracker ID, default IMEI.
- work-no: working number, hexadecimal string format, cyclic accumulation from 1 to 0xFFFF.
- cmd-code: Command code, or specification of data type.
- cmd-para: parameter or description of *cmd-code*, which is described in the following chapters.
- checksum: checksum of package, 2 bytes hexadecimal string format, XOR of {*<pack-len>,<ID>,<work-no>,<cmd-code>,<cmd-para>*}.
- \r\n: End of package, i.e. <CR><LF>.
- Without specification, multi-byte binary data in *cmd-para* uses big endian format, i.e. Most Significant Byte first.

3 SMS Command Format

Sending SMS (from mobile to tracker) command format:

<password>,<cmd-code>,<cmd-para>

Reply SMS (from tracker to mobile) data format:

<cmd-code>,<proc-result>

01 password: SMS password, 6 digits, default “000000”.

02 cmd-code: command code, the same as *cmd-code* field in GPRS command.

03 cmd-para: command parameter, the same as *cmd-para* field in GPRS command.

04 proc-result: command process result

OK – Succeed.

05 SMS command with invalid password, or with incorrect format, no reply will be sent.

4 Serial port (COM) Command Format

Setting command format:

#<cmd-code>,<cmd-para><CR><LF>

Reply data format

#<cmd-code>,<proc-result><CR><LF>

cmd-code, cmd-para: the same as corresponding field of GPRS/SMS command.

proc-result: COM command procession result

OK – Succeed.

UNSUPPORT – Command not supported.

FAILED –Procession failed.

5 Command Writing Specification

- Comma (,) is used to separate multi-field, there is no space before and after comma.
- For command with multi parameters, field(s) can be empty, the corresponding parameter is set to default.
- The following chapters describe *cmd-code* and *cmd-para*.
- The “Retrieve” row in the following chapters describes the corresponding query command.

6 Command List

B00 – Setting GPRS Parameters	
Source	GPRS/COM/SMS
Description	B00,<svr_type>,<server>,<port> 01 svr_type: server selection, 1--main server, 2--backup server; When the connection to main server cannot be reached, tracker will automatically connect to the backup server. This avoids data losses. 02 server: server IP or domain. 03 port: server port.
Reply	B00,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B00,1, 47.88.35.165,10502 01 Set main server: IP-47.88.35.165, port-10502.
Retrieve	C04,B00,<svr_type> 01 svr_type: server selection, the same as *svr_type* field in setting command.

B01 – Setting GPRS APN Parameters	
Source	GPRS/COM/SMS
Description	B01,<apn_name>,<apn_usr>,<apn_pwd> 01 apn_name: APN name. 02 apn_usr: APN user name. 03 apn_pwd: APN password. 04 Leave *apn_usr*, *apn_pwd* field empty, if no APN username and APN password exist. 05 Contact to local ISP for APN detail.
Reply	B01,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B01,cmnet 01 Set APN name to “cmnet”, APN login username and password empty.
Retrieve	C04,B01

B03 – Setting Tracking Time Interval	
Source	GPRS/COM/SMS
Description	B03,<basic_tmr>,<accoff_tmr> 01 basic_tme: normal time interval, unit s. Default 10s 02 accoff_tmr: time interval when ACC OFF, unit s, default 10s. 03 When *accoff_tmr* is set to 0, the acc-off uploading interval is set to *basic_tmr*
Reply	B03,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B03,30 01 Set timing tracking interval to 30s, tracker uploads position data every 30s. B03,30,0 01 Set timing tracking interval to 30s for ACC ON and ACC OFF
Retrieve	C04,B03

B05 – Setting Distance Tracking Interval	
Source	GPRS/COM/SMS
Description	B05,<basic_dst> 01 basic_dst: Distance tracking interval, unit meter. 02 Distance tracking is independent from timing tracking.
Reply	B05,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B05,100 01 Set distance tracking to 100m.
Retrieve	C04,B05

B07 – Setting the Direction Change Upload	
Source	GPRS/COM/SMS
Description	B07,<course> 01 course: direction change angle, unit degree, range 0--359, default 20. 02 When *course* is set to 0, direction change upload is disabled. 03 When driving direction change exceeds the setting value, tracker will upload a

	position data for supplement.
Reply	B07,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B07,30 01 Set direction change angle to 30°.
Retrieve	C04,B07

B08 – Setting Speeding Alarm

Source	GPRS/COM/SMS
Description	B08,<speeding> 01 speeding: speed, unit km/h, range 0--300, default 0. 02 When *speeding* is set to 0, speeding alarm is disabled.
Reply	B08,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B08,90 01 Set speed limit to 90km/h;
Retrieve	C04,B08

B10 – Setting SMS Password

Source	GPRS/COM/SMS
Description	B10,<sms_pwd> 01 sms_pwd: SMS password, 6 digits, default “000000”.
Reply	B10,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B10,472627 01 Set SMS password to “472627”. B10,47262A 01 Invalid command, because SMS password needs to be a 6 digits string.
Retrieve	C04,B10

B11 – Setting SOS Number	
Source	GPRS/COM/SMS
Description	B11,<sos_num1>,<sos_num2>,<sos_num3> 01 sos_num1, 2, 3: SOS numbers to be set; 3 numbers can be set at most. 02 Refer to *B23* for the function of SOS number(s).
Reply	B11,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B11,15698210011,,15698210200 01 Set *sos_num1* to 15698210011, *sos_num2* to empty, *sos_num3* to 15698210200.
Retrieve	C04,B11

B12 – Output Control	
Source	GPRS/COM/SMS
Description	B12,<index>,<action>,<safe_speed> 01 index: out port selection, 1~OUT1, other~invalid value 02 action: Output control, 0~output low level, 1~output high level. 03 safe_speed: speed limit, unit km/h, range 1~300; when this parameter is set to 0, or this field is empty, output control takes effect immediately; Other value, set the speed limit for output control. When the driving speed is lower than the speed limit, the output control takes effect.
Reply	B12,<err_code> 01 err_code: error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED –Processing failed.
Example	B12,1,1,20 01 Set OUT1 to output high level when speed less than 20km/h.
Retrieve	Command: C04,B12 Reply: B12,OUT1:status Example: B12,OUT1:0

B14 – Setting SMS Time Zone	
Source	GPRS/COM/SMS
Description	B14,<tzone>

	01 tzone: time zone, range [-12, 12]. 02 Default value of *tzone* is 0. 03 When SMS time zone is set, all alarm SMS use *tzone* for date & time.
Reply	B14,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B14,-8 01 Set SMS time zone to -8
Retrieve	C04,B14

B16 – Setting Initial Mileage

Source	GPRS/COM/SMS
Description	B16,<init_mile>,<engine_hour> 01 init_mile: initial mileage, unit meter, default 0m. 02 engine_hour: initial engine hour, unit s, default 0
Reply	B16,<err_code> 01 err_code: error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED –Processing failed.
Example	B16 01 Set initial mileage and engine hour to 0
Retrieve	C04,B16 01 The retrieved value is current mileage and engine hour, not the setting ones.

B17 – Clear Blind Data

Source	GPRS/COM/SMS
Description	B17,<data_type> 01 data_type: blind data type. 1 – GPRS Blind. 2 – SMS blind. 3 – Both GPRS and SMS blind.
Reply	B17,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B17,3

	01 Clear both GPRS and SMS blind data.
Retrieve	UNSUPPORT

B19 – Setting Circle geo-fence

Source	GPRS/COM/SMS
Description	B19,<index>,<flag>,<radium>,<lat>,<lon> 01 index: fence index, value 1~4, i.e.: 8 geo-fence can be set at most. 02 flag: alarm flag flag=1: Trigger alarm when exit fence. flag=2: Trigger alarm when enter fence. flag=3: Trigger alarm both enter and exit fence. 03 radium: radium of circle geo-fence, unit meter. 04 lat: latitude of center point, decimal string format. 05 lon: longitude of center point, decimal string format. 06 When *lat* and *lon* are empty, current latitude and longitude is used, while GPS valid signal is needed. 07 When *flag*, *radium*, *lat*, *lon* are empty, delete goe-fence specified by *index*; When *index*=0 or empty, delete all.
Reply	B19,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B19,1,3,200 01 Set the first circle geo-fence, centre point: current location, radium: 200m, output alarm when both enter and exit fence. B19,1 01 Delete 1# circle fence
Retrieve	C04,B19,<index> 01 index: fence index, value 1~8, the same as *index* field in setting command.

B21 – Setting Fatigue Driving

Source	GPRS/COM/SMS
Description	B21,<fatigue_time>,<rest_time> 01 fatigue_time: Fatigue driving time, unit s, default 14400s. 02 rest_time: Minimum rest time after fatigue driving, unit s, default 1200s. 03 When *fatigue_time* is set to 0, fatigue driving alarm is disabled. 04 The field *rest_time* can be empty, while the default value is used.
Reply	B21,<err_code>

	01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B21,14400,1800 01 Set fatigue driving time to the default value 14400s, and minimum rest time to the default value 1800s.
Retrieve	C04,B21

B22 – Setting Maximum Parking Time

Source	GPRS/COM/SMS
Description	B22,<time> 01 time: Maximum parking time, unit s, default 0s, i.e. parking overtime alarm is disabled. 02 When parking time exceeds preset value, a parking overtime alarm triggered. 03 When vehicle speed is 0, it is regards as parking.
Reply	B22,<err_code> 01 err_code: error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED –Processing failed.
Example	B22,1200 01 Set maximum parking time to 1200s.
Retrieve	C04,B22

B23 – Setting Alarm Action

Source	GPRS/COM/SMS
Description	B23,<alm-code>,<GPRS><SMS> 01 alm-code: Alarm type, refer to *Appendix –A*. 02 GPRS: Disable/enable GPRS uploading. 03 SMS: Disable/enable SMS to SOS number.
Reply	B23,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B23,2,11 01 Set action when SOS triggered: a Sending GPRS alarm data to platform. b Sending alarm SMS with *C01* format to SOS number.

Retrieve	C04,B23,<alm-code> 01 alm-code: Alarm type, refer to *Appendix–A*. The same as *alm-code* field in setting command.

B26 – Setting Alarm SMS Head String

Source	GPRS/COM/SMS
Description	B26,<alm-code>,<sms_string> 01 alm-code: Alarm type, refer to *Appendix –A*. 02 sms_string: SMS head string, 16 bytes length at most. 03 Refer to *Appendix-A* for default string.
Reply	B26,<err_code> 01 err_code: error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED –Processing failed.
Example	B26,2,HELP 01 Set SMS head string of SOS to “HELP”.
Retrieve	C04,B26,<alm-code> 01 alm-code: Alarm type, refer to *Appendix –A*. The same as *alm-code* field in setting command.

B27 – Setting Parameters of Harsh Acceleration Alarm

Source	GPRS/COM/SMS
Description	B27,<speed_var>,<time_lmt> 01 speed_var: maximum acceleration speed, unit km/h, default 0. 02 time_lmt: hard acceleration detection time, unit s, default 0. 03 Refer to *Appendix –A* for *alm-code* of harsh accelerate
Reply	B27,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B27,40,2 01 Set hard acceleration parameters: 40km/h speed variation within 2s.
Retrieve	C04,B27

B28 – Setting Parameters of Harsh Braking Alarm

Source	GPRS/COM/SMS

Description	B28,<speed_var>,<time_lmt> 01 speed_var: maximum decrease speed, unit km/h, default 0. 02 time_lmt: hard braking detection time, unit s, default 0. 03 When driving speed decrease beyond *speed_var*, tracker triggers hard braking alarm. 04 Refer to *Appendix –A* for *alm-code* of harsh brake
Reply	B28,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	Refer to example in *B27*
Retrieve	C04,B28

B33 – Setting Maximum Idle Time

Source	GPRS/COM/SMS
Description	B33,<idle_time> 01 idle_time: maximum idle time, unit: s, default 0s. It is suggested to set *idle_time* larger than 120s. 02 idle definition: ACC ON, but no speed, which means engine running under idle mode. 03 When idle mode detected, tracker starts idle time counter, and triggers Idling Alarm (*alm_code*=35), if counter exceeds *idle_time.*
Reply	B33,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B33,600 01 Set maximum idle time to 600s
Retrieve	C04,B33

B34 – Setting Voltage Range for AD Port

Source	GPRS/COM/SMS
Description	B34,<index>,<min_volt>,<max_volt>,<filter-option> 01 index: AD port index, 1~AD1, other~Invalid value 02 min_volt: AD port voltage when external input is 0%, unit V, default 0V 03 max_volt： AD port voltage when external input is 100%, unit V, default 5V 04 filter-option: filter option for AD sample data; *filter-option*==0 (default): When external power exists, sample AD data and upload real-time; When external power disconnected, keeping the last sample value, and upload to server

	filter-option==2: upload AD sample data real-time, ignoring ACC and external power status
Reply	B34,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B34,1,0,5.0 01 Setting voltage range of AD1 to [0,5]V, getting sample data when external power exist, keeping sample data when external power disconnected
Retrieve	C04,B34,<index>

B90 – Reset Tracker or Module

Source	GPRS/COM/SMS
Description	B90,< select > 01 select: option =1: Reset tracker. =2: Reset GPS module.
Reply	B90,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B90,1 01 Reset tracker.
Retrieve	UNSUPPORT

B91 – Setting Parameters to Default

Source	GPRS/COM/SMS
Description	B91 01 After command is set, all system parameters (except SMS password) are set to default.
Reply	B91,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B91
Retrieve	UNSUPPORT

B92 – Setting GPS Drift Suppression by ACC	
Source	GPRS/COM/SMS
Description	B92,enable 01 GPS drift: latitude/longitude, course, speed variable due to weak GPS signal 02 enable: 0 (default) ~ Disable GPS drift suppression by ACC 1 ~ Enable GPS drift suppression by ACC 03 When *enable==1*, tracker will do below actions if ACC OFF: keeps the last latitude/longitude in GPRS package stops mileage calculation stops course change detection
Reply	B92,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B92
Retrieve	UNSUPPORT

B94 – Turn on/off LED Display	
Source	GPRS/COM/SMS
Description	B94,<led-on> 01 led-on: 1--turn on LED, 0--turn off LED. 02 Default, *led-on*=1.
Reply	B94,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	B94 01 Set LED to default: turn on.
Retrieve	C04,B94

B99 – OTA using FTP Server	
Source	GPRS/COM/SMS
Description	B99,<file_name>,<option>,<ftp_address>,<ftp_port>,<ftp_loginid>,<ftp_loginpwd>,<apn>,<apn_name>,<apn_pwd> 01 file_name: file name for OTA, should be “xxx.bin” format

<table>
<tr><td></td><td>02 option: option for OTA, when the field empty, using default setting
<table>
<tr><th>option</th><th>Description</th></tr>
<tr><td>0(default)</td><td>Normal OTA, tracker check whether file_name match current version or not</td></tr>
<tr><td>1</td><td>Mandatory OTA, tracker doesn’t check file_name</td></tr>
</table>
03 ftp_address: FTP server address, default 47.88.17.17
04 ftp_port: FTP server port, default 21
05 ftp_loginid, ftp_loginpwd: FTP login user-name and password, when fields empty, using default account on 47.88.17.17
06 apn, apn_name, apn_pwd: APN setting for FTP connection, default, tracker using the same setting as B01 command
07 After B99 command received, tracker matches file_name to current firmware version, and starts OTA according to result
08 During OTA operation, tracker will disconnect from tracking server, stop timing uploading/photographing.
09 The timeout for FTP OTA is 15mins, when exceed, tracker will restart automatically, and connect to tracking server
10 External power connection is needed during OTA operation, it is used for tracking reboot after OTA finished</td></tr>
<tr><td>Reply</td><td>B99,<err_str>
01 err_str: Error code, string format
“Invalid BIN file” - file_name doesn’t match current firmware version
“No ext-pwr, Please Connect in 15mins” – External power disconnect
“The Same Version” – file_name has the same version to current firmware version
“OK” – OTA start</td></tr>
<tr><td>Example</td><td>B99,R18-V1.02.bin
01 Start OTA, tracker will connect to 47.88.17.17:21, using default FTP account for file download

B99,R18-V1.02.bin,1, 120.24.95.123,9208,klone,klone@@2017
01 Start OTA, tracker will connect to 120.24.95.123:9208, and upgrade to “R18-V1.02.bin”
02 The login name and password of FTP server is “klone” and “klone@@2017”</td></tr>
<tr><td>Retrieve</td><td></td></tr>
</table>

C01 – Retrieve Position Information

Source	COM/SMS/GPRS
Description	C01 01 After command is set, tracker sends a position message. 02 When alarm detected, tracker sends alarm SMS with C01 format automatically, to all SOS number(s).

	03 When command is sent via GPRS, tracker replies normal position data.
Reply	When command is sent via GPRS, the replied data is normal position package. When command is sent via SMS/COM <string_head>,yyyy-MM-dd hh:mm:ss, <spd>KM/h,<gprs_st>,<gps_fix>,EXPW:<PST> http://maps.google.com/maps?q=<Latitude>,<Longitude>&t=m a string_head: SMS head string, for normal position data, *string_head* is empty, for alarm data, refer to *Appendix-A* for default string. b yyyy-MM-dd hh:mm:ss: current date & time, which is effected by *B14* command setting. c spd: current speed, unit km/h. d gprs_st: GPRS link status, value: "Connected" or "Disconnected". e gps_fix: GPS signal status, 'A'-fixed, 'V'-not fixed. f PST: Status of ext-power input, "ON" -- ext-power is connected, "OFF" -- ext-power is disconnected. g Latitude, Longitude: Latitude and longitude of last position point.
Example	C01
Retrieve	UNSUPPORT

C02 – Retrieve Firmware/Hardware Version, SN, IMEI

Source	GPRS/COM/SMS
Description	C02
Reply	Uploading data format: C02,<IMEI>,<SN>,<fw_ver>,<hw_ver> 01 IMEI: IMEI of tracker. 02 SN: Serial number of tracker, for R18, the field empty 03 fw_ver: Firmware version. 04 hw_ver: Hardware version.
Example	C02 Reply: C02,867255079325959,,R18-V1.01,K-10030424
Retrieve	UNSUPPORT

C04 – Retrieve Parameter Setting

Source	GPRS/COM/SMS
Description	C04,<cmd-code>,<query_para> 01 cmd-code: Command code to be retrieved. 02 query_para: Query parameter; refer to chapters above for detail.
Reply	C04,<cmd>,<cmd-para> 01 cmd-code: The same as sending command. 02 cmd-para: Retrieved parameter string, the same format as setting command

	described in the above chapters.
Example	Refer to chapters above.
Retrieve	UNSUPPORT

C06 – Retrieve Basic Information of Tracker

Source	GPRS/COM/SMS
Description	C06 01 Retrieve basic information of tracker in batch 02 The command is commonly used for GPRS linkage lost debug
Reply	C06,<GID>,<ip>:<port>,TCP;APN:<apn>,<apn_user>,<apn_pwd>;EXT:<ext_st>;B03:<base_int> ,<accoff_int>;<ACC ON/OFF>;Cache:<cache-num> 01 GID: Tracker ID for GPRS data, default IMEI 02 ip, port: Server setting in tracker 03 apn, apn_user, apn_pwd: APN setting in tracker 04 ext_st: external power status, value ON, OFF 05 base_int, accoff_int: GPRS uploading interval for ACC ON/OFF status, which is the same as *B03* setting 06 ACC ON/OFF: Current ACC status, string, value “ACC ON” / “ACC OFF” 07 cache-num: Number of un-sent GPRS data package
Example	Command: C06 Reply: C06,867255079325959,47.88.35.165:10502,TCP;APN:,,;EXT:ON;B03:60,60,ACC ON;Cache:7
Retrieve	UNSUPPORT

C08 – Retrieving AD voltage

Source	GPRS/COM/SMS
Description	C08 01 The command is used to retrieve real-time voltage on AD port. 02 The result of *C08* reply is actual voltage on AD port, which isn’t effected by *B34* command setting
Reply	C08,<AD1>:<ad1-voltage> 01 adx-voltage: Voltage on ADx, unit V
Example	Command: C08 Reply: C08,AD1:4.32
Retrieve	UNSUPPORT

S09 – Setting GPRS Heartbeat Interval

Source	GPRS/COM/SMS
Description	S09,<acc-on-interval>,<acc-off-interval>

	01 Heartbeat package is independent from normal GPRS position one 02 acc-on-interval, acc-off-interval: Heartbeat interval for ACC ON and ACC OFF, unit: s; default *acc-on-interval==0*, *acc-off-interval==0*, which means heartbeat disabled 03 When *acc-on-interval* or *acc-off-interval* is set to 0, heartbeat disabled for corresponding ACC status 04 Heartbeat data will not be saved to blind buffer; When new heartbeat package generated, old and unsent one will be discarded
Reply	S09,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	S09,180,300 01 Setting heartbeat interval to 180s for ACC ON, and 300s for ACC OFF S09,0,300 01 Setting heartbeat interval to 300s for ACC OFF, and disable heartbeat for ACC ON S09 01 Disable heartbeat for both ACC ON and ACC OFF
Retrieve	C04,S09

S20 – Setting Backup APN Parameters

Source	GPRS/COM/SMS
Description	S20,<bkp_apn_name>,<bkp_apn_usr>,<bkp_apn_pwd> 01 bkp_apn_name: Backup APN name. 02 bkp_apn_usr: Backup APN user name. 03 bkp_apn_pwd: Backup APN password. 04 Backup APN may be used under roam status
Reply	S20,<err_code> 01 err_code: procession error code. OK – Succeed. UNSUPPORT – Command not supported. FAILED – Procession failed.
Example	
Retrieve	

Appendix A - Alarm Code and Alarm Parameter

The following table describes the relationship of *alm-code* and *alm-para* in GPS Position/Alarm data:

alm-code	alm-para	Description	SMS Head String
1	NULL	Distance tracking	Distance
2	NULL	Input1 active	SOS
3	NULL	Input1 inactive	IN1 Inactive
4	NULL	Input2 active	IN2
5	NULL	Input2 inactive	IN2 Inactive
15	NULL	Ext-power lost	Ext-Power Cut
16	NULL	Ext-power re-connect	Ext-Power On
18	NULL	Speeding alarm	Speeding
23	NULL	Harsh accelerate	Harsh Accelerate
24	NULL	Harsh braking	Harsh Braking
27	NULL	Fatigue driving	Fatigue Driving
28	NULL	Fatigue relieve	Fatigue Relieve
29	NULL	Parking overtime	Parking Overtime
33	fence index	Exit geo-fence	Exit Fence
34	The same as “Exit Fence”	Enter geo-fence	Enter Fence
35	NULL	Idling Alarm	Idling Alarm