AOVX
Aim of Valuables

AT Commands

GA Series_V1.5

History

Revision	Date	Author	Description
V1.0	2022-06-23	Tommy	Initial
V1.1	2022-07-28	Tommy	Added netmode and updated workmode
V1.2	2022-08-09	Yuki	Upgraded layout and added band configuration
V1.3	2022-10-18	Yuki	Upgraded layout and TEMP&HUMI
V1.4	2022-10-31	Yuki	Upgraded AT+LIGHT command
V1.5	**2022-11-17**	**Yuki**	**Added GNSSENABLE command**

Content

1. Introduction

(1) This document is described configuration commands via serial port,SMS and platform. For platform configuration, please refer to *AOVX_GA Series_Cloud Platform Protocol*.

(2) The serial port command needs to add the start symbol "AT+" at the start of the command, and the end symbol "\r\n" at the end of the command. SMS commands do not need to add prefix "AT+" and suffix "\r\n".

(3) Command keywords are case-insensitive. Punctuation symbols are an American input method. When writing text messages, please pay attention to input method switching to avoid command format errors.

2. General Tracker AT Commands

2.1. AT+RESET Reboot the Device

Commands	Reply	Description
Help commands **AT+RESET=?**	OK	
Configuration commands **AT+RESET**	OK	
Query commands **none**		

2.2. AT+LOG Configure Log Level

Commands	Reply	Description
Help commands **AT+LOG=?**	<level>: 0:disable all log 1:enable all log 2(default):enable some test log OK	Configure log level <level> 0:close all log 1:open all log 2:open part of the test log It takes effect immediately after configuration.
Configuration commands **AT+LOG=<level>**	+LOG:<level> OK	
Query commands **AT+LOG?**	+LOG:<level> OK	

2.3. AT+FORMAT Restore Factory Configuration

Commands	Reply	Description
Help commands **AT+FORMAT=?**	<index>: 0:restore all 1:restore all except ID 2:restore all except ID/main	Restore factory configuration <index> 0:all restore factory configuration

	IP/mileage/APN 3:restore all to factory OK	1: keep the ID, and restore the rest to the default configuration 2: keep the main IP, ID, mileage,APN and restore the rest to the default configuration 3: restore factory configuration
Configuration commands **AT+FORMAT=<index>**	+FORMAT:<index> OK	
Query commands **None**	none	

3. Basic Parameters Query

3.1. AT+QTV Query Firmware Version

Commands	Reply	Description
Help commands **AT+QTV=?**	OK	
Configuration commands **None**		
Query commands **AT+QTV?**	QTV:<firmware version> <datetime> OK	

3.2. AT+QINFO Query Device Information

Commands	Reply	Description
Help commands **AT+QINFO=?**	OK	Query device status information <id>:unique identification <operator>:operation name <mode>:network mode <csq>:network signal strength <gnss status>:position fix,position unfix <index>:server ID <ip>:server domain or IP <port>:server port <link status>:the connection status of server <apn>,<name>,<password>:the username and password of APN
Configuration commands **none**	none	
Query commands **AT+QINFO?**	+QINFO: ID:<id>	

	NET:<operator,mode> CSQ:<csq> GNSS:<gnss status> IP:<index>:<ip>:<port>:<link status> Report:<report interval> Sample:<sample interval> Wakeup:<wakeup interval> APN:<apn>:<name>:<password> OK	

3.3. AT+QIMEI Query IMEI

Command	Reply	Description
Help command **AT+QIMEI=?**	OK	Query IMEI
Configuration commands **none**	none	
Query commands **AT+QIMEI?**	+QIMEI:<imei> OK	

3.4. AT+QICCID Query ICCID

Commands	Reply	Description
Help commands **AT+QICCID=?**	OK	Query ICCID
Configuration commands **none**	none	
Query commands **AT+QICCID?**	+QICCID:<iccid> OK	

3.5. AT+QBS Query Main Base Station Information

Commands	Reply	Description
Help commands **AT+QBS=?**	OK	Query main base station information
Configuration commands **none**	none	
Query commands **AT+QBS?**	+QBS:<lac>,<ci> OK	

3.6. AT+QBAT Query Battery Charge Status

Commands	Reply	Description
Help commands **AT+QBAT=?**	OK	Check battery charge status <status>: charging: the battery is charging full: the battery is fully charged no: the device is uncharged
Configuration commands **none**	none	
Query **AT+QBAT?**	+QBAT:<status> OK	

3.7. AT+QTIME Query Date and Time

Commands	Reply	Description
Help commands **AT+QTIME=?**	OK	Query date and time
Configuration commands **none**	none	
Query commands	+QTIME:<time>	

AT+QTIME?	OK	

3.8. AT+GNSS Query GNSS status

Commands	Reply	Description
Help commands **AT+GNSS=?**	OK	Query GNSS status
Configuration commands	/	/
Query commands **AT+GNSS?**	+GNSS:<status>,<latitude>,<longitude>,<viewstar1>,<viewstar2>,<posstar>,<CN>|<CN>|<CN>|<CN>|<CN>|<CN>|<CN>|<CN> OK	Query GNSS visible satellite information <status>:position fix/position unfix <viewstar>: number of visible satellites <posstar>: number of positioning satellites <CN>: Visible satellite signal strength, a total of 8 are displayed in order of strength, less than 8 complement 0

3.9. AT+QADC Query Light Level and Battery Voltage

Commands	Reply	Description
Help commands **AT+QADC=?**	OK	Query light level& battery voltage. vol: the unit is mV
Query commands **none**	none	
Query commands **AT+QADC?**	+QADC:<light level>,<battery vol> OK	

3.10. AT+BLIND Query Buffer Data Status

Commands	Reply	Description
Help commands **AT+BLIND=?**	OK	Query buffer data information <cnt>: total number of buffer data <len>: total length of buffer <loss>: number of discarded buffer data rpos < x >: read offset address wpos < x >: write offset address
Configuration commands **none**	none	
Query commands **AT+BLIND?**	+BLIND:cnt:<cnt>,len:<len>,loss:<loss>,rpos0:<pos>,rpos1:<pos>,wpos0:<pos>,wpos1:<pos> OK	

3.11. AT+QGSENSOR Query Sensor Status

Commands	Reply	Description
Help commands **AT+QGSENSOR=?**	OK	Query the id and xyz values of the G sensor. The unit is mg.
Configuration commands **none**	none	
Query commands **AT+QGSENSOR?**	+QGSENSOR:<id>,<x>,<y>,<z> OK	

4. Basic Parameters Configuration

4.1. AT+ID Configure ID

Commands	Reply	Description
Help commands **AT+ID=?**	Device will use IMEI as ID when you set **AT+ID=""**; Device will add '0' or abandon automatically if the ID length does not match the protocol; The default ID is IMEI. OK	Configure the unique identification number. If not configured or configured as "", the IMEI number will be used as the ID by default. It takes effect immediately after configuration.
Configuration commands **AT+ID=<id>**	+ID:<id> OK	
Query commands **AT+ID?**	+ID:<id> OK	

4.2. AT+IP Configure IP and Port

Commands	Reply	Description
Help commands **AT+IP=?**	index: 0:main server 1:backup server ip: ip or domain port: Ignore this server if you set 0. OK	Configure specified IP and port, IP supports domain names; The port is configured as 0 to cancel this server. It takes effect immediately after configuration.
Configuration command **AT+IP=<index>,<ip>,<port>**	+IP:<index>,<ip>,<port> OK	
Query command **AT+IP?**	+IP:<index>,<ip>,<port> OK	

4.3. AT+TIMEGAP Configure the Reporting Interval

Commands	Reply	Description
Help commands **AT+TIMEGAP=?**	index: 0:report interval 1:sample interval 2:reserved 3:reserved time: unit is second. OK	<index>: 0:report interval 1:sample interval 2:reserved 3:reserved time: unit is second. After configuration, the next report will take effect.
Configuration commands **AT+TIMEGAP=<index>,<time>**	+TIMEGAP:<index>,<time> OK	
Query commands **AT+TIMEGAP?**	+TIMEGAP:report,<time>,sample,<time>,wakeup,<time>,wakeupmax,<time> OK	

4.4. AT+MOTION Configure Motion Parameters

Commands	Reply	Description
Help commands **AT+MOTION=?**	/	<count> & <time> : A motion event will be reported if the number of vibration events reaches <count> in the <time>. the unit of <time>: second <timegap>: Min interval of motion report
Configuration commands **AT+MOTION=<count>,<time>,<timegap>**	+MOTION:<count>,<time>,<timegap> OK	

Query commands **AT+MOTION?**	+MOTION:<count>,<time>,<timegap> OK	

4.5. AT+VIBPARAM Configure Vibration Parameters

Commands	Reply	Description
Help commands **AT+VIBPARAM=?**	/	<enable>: 0:disable 1:enable <range>: 0:2g 1:4g 2:8g 3:16g <sensitivity>: [0-255]
Configuration commands **AT+VIBPARAM=<enable>,<range>,<sensitivity>**	+VIBPARAM:<enable>,<range>,<sensitivity> OK	
Query commands **AT+VIBPARAM?**	+VIBPARAM:<enable>,<range>,<sensitivity> OK	

4.6. AT+APN Configure APN

Commands	Reply	Description
Help commands **AT+APN=?**	OK	Configure access point name, user name and password
Configuration commands **AT+APN=<apn>,<name>,<password>**	+APN:<apn>,<name>,<password> OK	Clear the corresponding fields: leave <apn>/<name>/<password>blank. For example, clear the user name and password: **AT +**

		APN = < apn >,,
Query commands AT+APN?	+APN:<apn>,<name>,<password> OK	

4.7. AT+TIMEZONE Configure Time Zone

Commands	Reply	Description
Help commands AT+TIMEZONE=?	[-11,12] OK	Configure time zone, the value range of zone [-11,12]
Configuration commands AT+TIMEZONE=<zone>	+TIMEZONE:<zone> OK	
Query commands AT+TIMEZONE?	+TIMEZONE:<zone> OK	

4.8. AT+QNMEA Open/Close NMEA Sentences

Commands	Reply	Description
Help commands AT+QNMEA=?	OK	Open or close NMEA sentence output <status>: [yes,no]
Configuration commands AT+QNMEA	+QNMEA:<status> OK	
Query commands none	none	

4.9. AT+MILEAGE Configure Initial Mileage

Commands	Reply	Description
Help commands AT+MILEAGE=?	the unit is meter. OK	Configure the initial mileage, the unit is meter

Configuration commands **AT+MILEAGE=<mile>**	+MILEAGE:<mile> OK	
Query commands **AT+MILEAGE?**	+MILEAGE:<mile> OK	

4.10. AT+FOTA Start FOTA Upgrade

Commands	Reply	Description
Help commands **AT+FOTA=?**	<type>: 0:update app 1:update core <version>: It can be ignore if the “url” include the version <url>: full http url for fota OK	OTA upgrade <type>: 0:update app 1:update core <version>: It can be ignore if the “url” include the version. <url>: full http url for fota
Configuration commands **AT+FOTA=[type],[version],[url]**	+FOTA:<type>,<version>,<url> OK	
Query commands **None**		

4.11. AT+GNSS Enable/Disable GNSS

Commands	Reply	Description
Help commands **AT+GNSSENABLE?**	/	
Configuration commands **AT+GNSSENABLE=<index>**	+GNSSENABLE:<index> OK	index: 0:disable 1:enable
Query commands	+GNSSENABLE:<index>	

AT+GNSSENABLE?	OK	

4.12. AT+WIFIENABLE Enable/Disable WIFI

Commands	Reply	Description
Help commands **AT+WIFIENABLE=?**	/	<enable>: 0:disable 1:enable <scantime>: WIFI signal scantime, the unit is second.
Configuration commands **AT+WIFIENABLE=<enable>,<scantime>**	+WIFIENABLE:<enable>,<scantime> OK	
Query commands **AT+WIFIENABLE?**	+WIFIENABLE:<enable>,<scantime> OK	

4.13. AT+BTENABLE Enable/Disable Bluetooth

Commands	Reply	Description
Help commands **AT+BTENABLE=?**	/	<enable>: 0:disable 1:enable <scantime>: BT signal scantime, the unit is second
Configuration commands **AT+BTENABLE=<enable>,<scantime>**	+BTENABLE:<enable>,<scantime> OK	

Query commands **AT+BTENABLE?**	+BTENABLE:<enable>,<scan time> OK	

4.14. AT+REPORTMASK Set Report Mask for 0x0200 Package

Commands	Reply	Description
Help commands **AT+REPORTMASK=?**	/	<mask>: Bit0:gnss Bit1:mileage Bit2:mobile network signal Bit3:the number of satellites used by gnss Bit4:main cell station information Bit5:reserved Bit6:reserved Bit7:firmware version Bit8:bluetooth infomation Bit9:wifi infomation Bit10:reserved Bit11:trigger type and sensor information Bit12:battery infomation Bit13:device infomation Bit14:auxiliary information
Configuration commands **AT+REPORTMASK=<mask>**	+REPORTMASK:<mask> OK	
Query commands **AT+REPORTMASK?**	+REPORTMASK:<mask> OK	

4.15. AT+SENSORMASK Set Sensor Mask for 0x0200 Package

Commands	Reply	Description
Help commands **AT+SENSORMASK=?**	/	<mask>: Bit0:light Bit1:temperature Bit2:humidity Bit3:acceleration value Bit4:sensor threshold Bit5-7:reserved
Configuration commands **AT+SENSORMASK=<mask>**	+SENSORMASK:<mask> OK	
Query commands **AT+SENSORMASK?**	+SENSORMASK:<mask> OK	

4.16. AT+TEMPRANGE Set Temperature Threshold

Commands	Reply	Description
Help commands **AT+TEMPRANGE=?**	/	<tmax>: upper temperature limit <tmin>: lower temperature limit
Configuration commands **AT+TEMPRANGE=**<tmax>,<tmin>	+TEMPRANGE:<tmax>,<tmin> OK	
Query commands **AT+TEMPRANGE?**	+TEMPRANGE:<tmax>,<tmin> OK	

4.17. AT+HUMIRANGE Set Humidity Threshold

Commands	Reply	Description
Help commands **AT+HUMIRANGE=?**	/	<hmax>: upper humidity limit <hmin>: lower humidity limit
Configuration commands **AT+HUMIRANGE=**<hmax>,<hmin>	+HUMIRANGE:<hmax>,<hmin> OK	
Query commands **AT+HUMIRANGE?**	+HUMIRANGE:<hmax>,<hmin> OK	

5. Modes Configuration and Query

5.1. AT+GNSSMODE Set the GNSS galaxy

Commands	Reply	Description
Help commands **AT+GNSSMODE=?**	/	<galaxy>: 0:gps+bd 1:gps+glo 2:gps+gal reserve:0
Configuration commands **AT+GNSSMODE=<galaxy>,<reserve>,<reserve>**	+GNSSMODE:<galaxy>,<reserve>,<reserve> OK	
Query commands **AT+GNSSMODE?**	+GNSSMODE:<galaxy>,<reserve>,<reserve> OK	

5.2. AT+BTMODE Set Bluetooth Mode and Mask

Commands	Reply	Description
Help commands **AT+BTMODE=?**	/	<mode>: 0:reserved <mask>: Bit0:name Bit1:firmware version Bit2:voltage Bit3:temperature Bit4:humidity Bit5:acceleration value Bit6-7:reserved
Configuration commands **AT+BTMODE=<mode>,<ma**	+BTMODE:<mode>,<mask>	

sk>	OK	
Query commands **AT+BTMODE?**	+BTMODE:<mode>,<mask> OK	

5.3. AT+REPORTMODE Set Report Transmission Protocol Mode

Commands	Reply	Description
Help commands **AT+REPORTMODE=?**	/	<mode>: 0:TCP 1:UDP
Configuration commands **AT+REPORTMODE=<mode>**	+REPORTMODE:<mode> OK	
Query commands **AT+REPORTMODE?**	+REPORTMODE:<mode> OK	

5.4. AT+WORKMODE Set Work Mode

Commands	Reply	Description
Help commands **AT+WORKMODE=?**	/	<mode>: 0:Periodic mode* 1:Trigger mode* 2:Tracking mode+Trigger mode 3:Clock mode+Trigger mode* 4:Periodic mode+Trigger mode
Configuration commands **AT+WORKMODE=<mode>**	+WORKMODE:<mode> OK	
Query commands	+WORKMODE:<mode>	

AT+WORKMODE?	OK	

5.5. AT+CONNECTMODE Set Server Connect Mode

Commands	Reply	Description
Help commands **AT+CONNECTMODE=?**	/	<mode>: 0:short connect mode 1:long connect mode Only for Tracking mode
Configuration commands **AT+CONNECTMODE=<mode>**	+CONNECTMODE:<mode> OK	
Query commands **AT+CONNECTMODE?**	+CONNECTMODE:<mode> OK	

5.6. AT+TEMPHUMI Set Temperature and Humidity Mode

Commands	Reply	Description
Help commands **AT+TEMPHUMI=?**	/	<enable>: 0:disable 1:enable <timegap>: temperature and humidity report interval ,the unit is second.
Configuration commands **AT+TEMPHUMI=**<enable>,<timegap>	+TEMPHUMI:<enable>,<timegap> OK	
Query commands **AT+TEMPHUMI?**	+TEMPHUMI:<enable>,<timegap>	

	OK	

5.7. AT+LIGHT Set Light Mode and Threshold

Commands	Reply	Description
Help commands **AT+LIGHT=?**	/	<enable>: 0:disable 1:enable <threshold>: light threshold <timegap>: light report interval ,the unit is second.
Configuration commands **AT+LIGHT=**<enable>,<threshold>,<timegap>	+LIGHT:<enable>,<threshold>,<timegap> OK	
Query commands **AT+LIGHT?**	+LIGHT:<enable>,<threshold>,<timegap> OK	

5.8. AT+NETMODE Set NETMODE

Commands	Reply	Description
Help commands **AT+NETMODE=?**	/	<mode>: 0:AUTO 1:GSM only 2:LTE(CAT1/CATM) only 3:CATM+NB 4:GSM+NB 5:NB only NOTE:

		GL/AL support 0,1,2; GM/AM support 0,1,2,3,4,5.
Configuration commands **AT+NETMODE=<mode>**	+NETMODE:<mode> OK	
Query commands **AT+NETMODE?**	+NETMODE:<mode> OK	

6. Module AT Commands Transparent Transmission

6.1. AT+CMD Module AT Command Transparent Transmission

Commands	Reply	Description
Help commands **AT+CMD=?**	OK	Module AT transparent transmission command
Configuration commands **AT+CMD=<command>**	<at respond>	
Query commands **none**	none	

6.2. AT+QCFG=band Configure Frequency Band

6.2.1. GM100/AM300

AT+QCFG="band" Configure Frequency Band

This Write Command configures the frequency bands to be searched for or queries the current setting.

AT+QCFG="band" Configure Frequency Band	
Write Command **AT+QCFG="band"[,<GSM_bandval>,<eMTC_bandval>,<NB-IoT_bandval>[,<effect>]]**	Response If the optional parameters are omitted, query the current setting: +QCFG: "band",<GSM_bandval>,<eMTC_bandval>,<NB-IoT_bandval>
	OK
	If any of the optional parameters is specified, configure the frequency bands to be searched for: OK
	If there is an error related to ME functionality: +CME ERROR: <err>

	If there is any other error: ERROR
Maximum Response Time	300 ms
Characteristics	<effect> determines when the command will take effect. The configurations will be saved automatically.

Parameter	
<GSM_bandval> A	hexadecimal value that specifies the GSM frequency band (e.g.: 0xa = 0x2(DCS1800) + 0x8(PCS1900)). If it is set to 0, it means not to change GSM frequency band. 0 No change 0x1 EGSM900 0x2 DCS1800 0x4 GSM850 0x8 PCS1900 0xF All of the supported bands above
<eMTC_bandval> A	hexadecimal value that specifies the eMTC frequency band (e.g.: 0x15 = 0x1(LTE B1) + 0x4(LTE B3) + 0x10(LTE B5)). If it is set to 0, it means not to change the eMTC frequency band. 0 No change 0x1 (BAND_PREF_LTE_BAND1) LTE B1 0x2 (BAND_PREF_LTE_BAND2) LTE B2 0x4 (BAND_PREF_LTE_BAND3) LTE B3 0x8 (BAND_PREF_LTE_BAND4) LTE B4 0x10 (BAND_PREF_LTE_BAND5) LTE B5 0x80 (BAND_PREF_LTE_BAND8) LTE B8 0x800 (BAND_PREF_LTE_BAND12) LTE B12 0x1000 (BAND_PREF_LTE_BAND13) LTE B13 0x20000 (BAND_PREF_LTE_BAND18) LTE B18 0x40000 (BAND_PREF_LTE_BAND19) LTE B19 0x80000 (BAND_PREF_LTE_BAND20) LTE B20 0x1000000 (BAND_PREF_LTE_BAND25) LTE B25 0x2000000 (BAND_PREF_LTE_BAND26) LTE B26 0x4000000 (BAND_PREF_LTE_BAND27) LTE B27 0x8000000 (BAND_PREF_LTE_BAND28) LTE B28 0x40000000 (BAND_PREF_LTE_BAND31) LTE B31

	0x20000000000000000 (BAND_PREF_LTE_BAND66) LTE B66 0x800000000000000000 (BAND_PREF_LTE_BAND72 LTE B72 0x1000000000000000000 (BAND_PREF_LTE_BAND73) LTE B73 0x10000000000000000000 (BAND_PREF_LTE_BAND85) LTE B85
<NB-IoT_bandval> **A**	hexadecimal value that specifies the NB-IoT frequency band (e.g.: 0x15 = 0x1(LTE B1) + 0x4(LTE B3) + 0x10(LTE B5)). If it is set to 0, it means not to change the NB-IoT frequency band. 0 No change 0x1 (BAND_PREF_LTE_BAND1) LTE B1 0x2 (BAND_PREF_LTE_BAND2) LTE B2 0x4 (BAND_PREF_LTE_BAND3) LTE B3 0x8 (BAND_PREF_LTE_BAND4) LTE B4 0x10 (BAND_PREF_LTE_BAND5) LTE B5 0x80 (BAND_PREF_LTE_BAND8) LTE B8 0x800 (BAND_PREF_LTE_BAND12) LTE B12 0x1000 (BAND_PREF_LTE_BAND13) LTE B13 0x20000 (BAND_PREF_LTE_BAND18) LTE B18 0x40000 (BAND_PREF_LTE_BAND19) LTE B19 0x80000 (BAND_PREF_LTE_BAND20) LTE B20 0x1000000 (BAND_PREF_LTE_BAND25) LTE B25 0x8000000 (BAND_PREF_LTE_BAND28) LTE B28 0x40000000 (BAND_PREF_LTE_BAND31) LTE B31 0x20000000000000000 (BAND_PREF_LTE_BAND66) LTE B66 0x400000000000000000 (BAND_PREF_LTE_BAND71) LTE B71 0x800000000000000000 (BAND_PREF_LTE_BAND72) LTE B72 0x1000000000000000000 (BAND_PREF_LTE_BAND73) LTE B73 0x10000000000000000000 (BAND_PREF_LTE_BAND85) LTE B85
<effect>	Integer type. When to take effect. 0 Take effect after rebooting 1 Take effect immediately

NOTE:

- For the specific bands supported by each model, see corresponding specifications of the modules.

  <GSM_bandval> is valid only on BG95-M3, BG95-M5 and BG600L-M3 modules.

<NB-IoT_bandval> is invalid on BG95-M1 module.

LTE B31/B72/B73 is valid on BG95-M4 module only.

- The value setting of <eMTC_bandval> when all eMTC bands are intended to be searched for:

  0x100182000000004F0E189F for BG95-M4

  0x100002000000000F0E189F for BG77, BG600L-M3 and other BG95 series modules

- The value setting of <NB-IoT_bandval> when all NB-IoT bands are intended to be searched for:

  0x10018200000000490E189F for BG95-M4

  0x10004200000000090E189F for BG77, BG600L-M3 and other BG95 series modules

6.2.2. GL100/AL300

This Write Command configures the frequency bands to be searched for or queries the current setting.

AT+QCFG="band" Configure Frequency Band	
Write Command **AT+QCFG="band"[,<bandval>,<lte ba ndval>[,<effect>]**	Response If the optional parameters are omitted, query the current setting: +QCFG: +QCFG: "band",<bandval>,<ltebandval>
	OK
	If any of the optional parameters is specified, configure the frequency bands to be searched for: OK or ERROR

	If there is an error related to ME functionality: +CME ERROR: <err>
Maximum Response Time	300 ms
Characteristics	<effect> determines when the command will take effect. The configurations will be saved automatically.

Parameter	
<bandval>	hexadecimal value that specifies the GSM frequency band. If it is set to 0, it means not to change GSM frequency band.(eg: 0003 = 0001 (EGSM900) + 0002 (DCS1800)) 0 No change 0001 EGSM900 0002 DCS1800 0004 GSM850 0008 PCS1900 FFFF All of the supported bands above
<ltebandval>	hexadecimal value that specifies the LTE frequency band. If it is set to 0, it means not to change the LTE frequency band.(e.g.: 0x15 = 0x1 (LTE B1) + 0x4 (LTE B3) + 0x10 (LTE B5)) 0 No change 0x1 (CM_BAND_PREF_LTE_EUTRAN_BAND1) LTE B1 0x2 (CM_BAND_PREF_LTE_EUTRAN_BAND2) LTE B2 0x4 (CM_BAND_PREF_LTE_EUTRAN_BAND3) LTE B3 0x8 (CM_BAND_PREF_LTE_EUTRAN_BAND4) LTE B4 0x10 (CM_BAND_PREF_LTE_EUTRAN_BAND5) LTE B5 0x40 (CM_BAND_PREF_LTE_EUTRAN_BAND7) LTE B7 0x80 (CM_BAND_PREF_LTE_EUTRAN_BAND8) LTE B8

	0x80000 (CM_BAND_PREF_LTE_EUTRAN_BAND20) LTE B20 0x8000000 (CM_BAND_PREF_LTE_EUTRAN_BAND28 LTE B28 0x200000000 (CM_BAND_PREF_LTE_EUTRAN_BAND34) LTE B34 0x2000000000 (CM_BAND_PREF_LTE_EUTRAN_BAND38) LTE B38 0x4000000000 (CM_BAND_PREF_LTE_EUTRAN_BAND39) LTE B39 0x8000000000 (CM_BAND_PREF_LTE_EUTRAN_BAND40) LTE B40 0x10000000000 (CM_BAND_PREF_LTE_EUTRAN_BAND41) LTE B41 0x20000000000000000(CM_BAND_PREF_LTE_EUTRAN_BAND66) LTE B66 0x7FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF(CM_BAND_PREF_ANY) All of the supported bands above
<effect>	Integer type. When to take effect. 0 Take effect after rebooting 1 Take effect immediately

NOTE:

- The module can set up to 5 LTE bands at the same time (<ltebandval>when set to "all Band", all the set bands can be unlocked); If it sets more than 5 frequency bands, an error code will be responsed.
- For details of the frequency bands actually supported by the module, please refer to the product specification of each device.

6.2.3. GG100*/AG300*

AT+QBAND Get and Set Mobile Operation Band

Test Command **AT+QBAND=?**	Response +QBAND: (list of supported <op_band>s) OK
Read Command **AT+QBAND?**	Response +QBAND: <op_band> OK
Write Command **AT+QBAND=<op_band>**	Response OK If there is any error related to ME functionality: +CME ERROR: <err>
Maximum Response Time	30s, determined by network.