MIU620L-AT001

MiFi 4G LTE Global USB Modem U620L

AT Command Reference Guide

Version 1.0

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Introduction

This document lists and describes the AT Command Set to be used in conjunction with the Novatel Wireless MiFi 4G LTE Global USB Modem U620L.

Platform Reference and Use

In this document, the device may be referred to using various terms, such as MS (Mobile Station), TA (Terminal Adapter), DCE (Data Communication Equipment), or ME (Mobile Equipment).

You can control the device on a DTE (Data Terminal Equipment) platform by issuing the AT commands through a serial interface.

Command Syntax

The attention or "AT" prefix is required prior to entering any command. All commands require a carriage return or <CR> following the entry of the command. All command responses are encapsulated by a carriage return and line feed or <CR><LF>. The ASCII display of these characters is suppressed with only the modem response being presented.

In addition to terminating AT commands, you can use the carriage return <CR> to abort commands that are executing.

Most AT commands complete immediately so there is no opportunity to abort them, for instance ATI. However, some commands like AT+COPS or AT+CFUN can take several seconds to complete. The AT command interface is said to be in execution mode when a command is running and has not returned a result code (OK/ERROR). A second <CR> entered while the AT command interface is in execution mode aborts the command and returns the interface to command mode.

Some AT commands require additional input, for instance AT+CMGS. After terminating the AT+CMGS command with a <CR> the AT command interface enters line edit mode. While in line edit mode all characters are accepted except CNTL-Z. CNTL-Z terminates line edit mode and the AT command interface enters execution mode. Like before, at this point another <CR> aborts the command.

You can concatenate an AT message using the semicolon (;) between commands.

The following examples demonstrate the potential usage of AT commands presented:

Type	Example	Description
Command Format Query	AT+GXXX=?	Returns the command format and value ranges.
Command Read	AT+GXXX?	Returns the current value assigned to the command.
Command Write	AT+GXXX=<value>,<value>,	Sets the command to specified value(s).
Command Execution	AT+GXXX	Executes the specified command.
Command Concatenation	AT+CRC=1;S0=1	Executes both the CRC and S0 command.

Standard AT Commands

The following is the format in which all commands will be presented.

Command Function	(Description of the command function)
Query Syntax	ATx=?
Query Response	ATx: (parameter1 name 1 – 15), (parameter2 name 1-10),…
Write Syntax	ATx=<value>,<value>[,<optional value>],…
Write Response	OK or ERROR
Read Syntax	ATx?
Read Response	<value>,<value>,…
Execute Syntax	ATx
Execute Response	OK, ERROR, or <value>
Unsolicited Response	
Parameter Values	
<Value 1>	ATx: (1-15),(1-10)
<Value 2>	
Notes	(Additional command notes)
Examples	

NOTE: Where applicable, the <value> responses provided for the READ and EXECUTE formats are modem default values. All efforts will be made by Novatel Wireless. to keep these values current in the documentation but will not be responsible for any differences that may occur as a result subsequent software builds and version enhancements.

WARNING! Do not use tab characters in the custom AT command scripts.

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NVTL

AT$CNTI

Command	AT$CNTI
Command Function	Queries the current network technology.
Query Syntax	AT$CNTI=?
Query Response	CNTI: (0-2)
Write Syntax	
Write Response	
Read Syntax	AT$CNTI?
Read Response	$CNTI: 0, LTE $CNTI: 1, LTE $CNTI: 2, GSM, GPRS, EDGE, UMTS, HSDPA, HSUPA, HSPA+, HSPA+DC, LTE, 1xRTT, EVDO, EVDO_REL_0, EVDO_REL_A, EVDO_REL_B
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	0 - <current network access technology 1 - <supported network access technologies> 2 - <all supported network access technologies by the device>” where the network access technologies have the following values: GPRS – GPRS network EDGE – Edge network UMTS – UMTS network HSDPA – HSDPA network HSUPA – HSUPA network HSPA+ – HSPA Plus HSPA+DC – HSPA plus DC
Notes	
Examples	

AT$NWACTIVATION

Command	AT$NWACTIVATION
Command Function	Queries MDN, MIN.
Query Syntax	AT$NWACTIVATION=?
Query Response	NWACTIVATION: (ACTIVATION CODE:[xxxxxx] MDN:[XXXXXXXXXX] MIN: [XXXXXXXXXX])
Write Syntax	
Write Response	
Read Syntax	AT$NWACTIVATION?
Read Response	NWACTIVATION: 8584721331, 8584721331
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <Activation Code>	
— <MDN>	
— <MIN>	
Notes	
Examples	

AT$NWATI

Command	AT$NWATI
Command Function	Queries the superset of the ATI command and adds some more info to that AT command.
Query Syntax	AT$NWATI=?
Query Response	Manufacturer: Novatel Wireless Incorporated Model: MiFi 6620L Revision: 2.03+ SVN 0 [Feb 4 2014 13:56:48] (Engineering Build - FW123_) SVN: 00 +GCAP: +CLTE1, +CIS707-A, +MS, +ES, +DS VID:PID:RID: 0x1410:0xb00d MEID:0x99000062989008 ESN:0x80226577 HWREV:0 MSISDN:+ IMSI:311480083505147 OK
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	

Parameter Values	Response: Manufacturer: Model: Revision: SVN: +GCAP: VID:PID:RID: MEID: ESN: HWREV: FID: MSISDN: IMSI:
Notes	
Examples	

AT$NWATR

Command	AT$NWATR
Command Function	Reads the ATR (answer-to-reset) string from the SIM. Used for the AT+CSIM to determine the capabilities of the SIM (used by the application layer).
Query Syntax	AT$NWATR=?
Query Response	$NWATR: <length>, <atr_string>
Write Syntax	
Write Response	
Read Syntax	AT$NWATR?
Read Response	$NWATR: 23,3b9f97c00a1fc78031e073fe211b65d0011009228100f2
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <length>	
— <atr_string>	
Notes	
Examples	

AT$NWBAND

Command	AT$NWBAND
Command Function	Reads the band preference. The band preference returned is read from NV item's NV_BAND_PREF_I and NV_BAND_PREF_16_31_I
Query Syntax	AT$NWBAND=?
Query Response	<band> bit definitions
Write Syntax	=<band_pref>
Write Response	
Read Syntax	AT$NWBAND?
Read Response	4e80187
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <band_pref>	This is a 32-bit hexadecimal value that has the bits set for each band that needs to be enabled. Refer to the query operation for the meaning of each bit.

— <band>	00 CDMA2000 Band Class 0, A-System 01 CDMA2000 Band Class 0, B-System 02 CDMA2000 Band Class 1, all blocks 03 CDMA2000 Band Class 2 place holder 04 CDMA2000 Band Class 3, A-System 05 CDMA2000 Band Class 4, all blocks 06 CDMA2000 Band Class 5, all blocks 07 GSM DCS band 08 GSM Extended GSM (E-GSM) band 09 GSM Primary GSM (P-GSM) band 10 CDMA2000 Band Class 6 11 CDMA2000 Band Class 7 12 CDMA2000 Band Class 8 13 CDMA2000 Band Class 9 14 CDMA2000 Band Class 10 15 CDMA2000 Band Class 11 16 GSM 450 band 17 GSM 480 band 18 GSM 750 band 19 GSM 850 band 20 GSM Band 21 GSM PCS band 22 WCDMA I IMT 2000 band 23 WCDMA II PCS band 24 WCDMA III 1700 band 25 WCDMA IV 1700 band 26 WCDMA V US850 band 27 WCDMA VI JAPAN 800 band 28 Reserved for BC12/BC14 29 Reserved for BC12/BC14 30 Reserved 31 Reserved
Notes	
Examples	

AT$NWBAND2

Command	AT$NWBAND2
Command Function	Reads the band preference <band-pref>. The band preference returned is read from NV item NV_BAND_PREF_32_63_I. Queries the possible bands <band>.
Query Syntax	AT$NWBAND2=?
Query Response	$NWBAND2: <band> bit definitions
Write Syntax	
Write Response	
Read Syntax	AT$NWBAND2?
Read Response	20000
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <band_pref>	

— <band>	00 WLAN US 2400 band 01 WLAN ETSI 2400 band 02 WLAN FRANCE 2400 band 03 WLAN SPAIN 2400 band 04 WLAN JAPAN 2400 band 05 WLAN US 2400 band 06 WLAN EUROPE 5000 band 07 WLAN FRANCE 5000 band 08 WLAN SPAIN 5000 band 09 WLAN JAPAN 5000 band 10 Reserved 11 Reserved 12 Reserved 13 Reserved 14 Reserved 15 Reserved 16 WCDMA EUROPE 2600 band 17 WCDMA EUROPE & JAPAN 900 band 18 WCDMA JAPAN 1700 band 19 Reserved for WLAN 20 Reserved for WLAN 21 Reserved for WLAN 22 Reserved for WLAN 23 Reserved for WLAN 24 Band Class 16 25 Reserved 26 Reserved 27 Reserved 28 Reserved 29 Reserved 30 Persistent value from NV 31 Reserved
Notes	
Examples	

AT$NWCCMAUTOCONNECT

Command	AT$NWCCMAUTOCONNECT
Command Function	Changes auto connect option of the device.
Query Syntax	AT$NWCCMAUTOCONNECT=?
Query Response	AT$NWCCMAUTOCONNECT= <auto connect option (0-3)>
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT$NWCCMAUTOCONNECT=<auto connect option>
Execute Response	OK
Unsolicited Response	
Parameter Values	
— <auto connect option>	0 - 1 - 2 - 3 -
Notes	
Examples	

AT$NWCCMCONNECT

Command	AT$NWCCMCONNECT
Command Function	Connects or disconnects on ECM/RNDIS Interface.
Query Syntax	AT$NWCCMCONNECT=?
Query Response	$NWCCMCONNECT= <0-connect-disconnect>,<PDP_IP_type:0-v4 1-v6 2-v4v6>
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT$NWCCMCONNECT=<0-connect/1- disconnect>,<PDP_IP_type:0-v4 1-v6 2-v4v6>
Execute Response	OK
Unsolicited Response	
Parameter Values	
— <connect/disconnect>	0 - connect 1 - disconnect
— <PDP_IP_type>	0 - v4 1 - v6 2 -v4v6
Notes	
Examples	

AT$NWCFT

Command	AT$NWCFT
Command Function	Reads or sets up the COPS response format.
Query Syntax	AT$NWCFT=?
Query Response	NWCFT: 0,1
Write Syntax	AT$NWCFT=<mode>
Write Response	OK
Read Syntax	AT$NWCFT?
Read Response	NWCFT: 12
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <mode>	0 – Novatel COPS Format 1 – 3GPP COPS Format
Notes	
Examples	

AT$NWCHBAND

Command	AT$NWCHBAND
Command Function	Queries current Channel/Bandclass and allows unsolicited AT events reporting change in Channel/Bandclass.
Query Syntax	AT$NWCHBAND=?
Query Response	OK NWCHBAND: 0, 123
Write Syntax	
Write Response	
Read Syntax	AT$NWCHBAND?
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <Channel>	
— <Bandclass>	
Notes	Device camps on LTE.
Examples	

AT$NWCID

Command	AT$NWCID
Command Function	Gets the cell ID and LAC (local access code) from current modes.
Query Syntax	AT$NWCID=?
Query Response	NWCID: (0/xxxx,yyyy/,zzzz) 0-ERROR , xxxx,yyyy - Cellid, LAC , zzzz - only LAC
Write Syntax	
Write Response	
Read Syntax	AT$NWCID?
Read Response	NWCID: 18720,65534
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <mode>	0 - ERROR xxxx,yyyy (Cellid, LAC) zzzz (LAC) **NOTE:** If xxxx, yyyy or zzzz is 0xFFFF, it means invalid value.
Notes	
Examples	

AT$NWCSLFILTER

Command	AT$NWCSLFILTER
Command Function	Returns whether scan list filtering is enabled or not. Also, enables or disables +COPS scan list filtering.
Query Syntax	AT$NWCSLFILTER=?
Query Response	NWCSLFILTER: 0 (disabled),1 (enabled)
Write Syntax	AT$NWCSLFILTER=
Write Response	OK
Read Syntax	AT$NWCSLFILTER?
Read Response	NWCSLFILTER: 3489942284
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <value>	0 - filtering disabled 1 - filtering enabled
Notes	
Examples	

AT$NWDATAUSAGE

Command	AT$NWDATAUSAGE
Command Function	Connects to network to start Data Usage query process.
Query Syntax	AT$NWDATAUSAGE
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	AT$NWDATAUSAGE?
Read Response	<state:0>,<type:Shared>,<limit:100>, <totalusage:0.630>,<lineusage:0.043>, <usagedate:2015-03-12T05:05>,<cycleendday:04/06/2015>,<uint:GB>
Execute Syntax	AT$NWDATAUSAGE
Execute Response	OK
Unsolicited Response	
Parameter Values	
Notes	This is used in Enterprise Mode.
Examples	

AT$NWDEGC

Command	AT$NWDEGC
Command Function	Queries the PMIC temperature (in degrees Celsius only).
Query Syntax	AT$NWDEGC=?
Query Response	$NWDEGC: <temp degC>
Write Syntax	
Write Response	
Read Syntax	AT$NWDEGC
Read Response	$nwdegc: 32 degC
Execute Syntax	
Execute Response	
Parameter Values	
— <temp degC>	
Notes	
Examples	

AT$NWDIVCTRL

Command	AT$NWDIVCTRL
Command Function	Shows the diversity configuration for the various technologies stored in the NW_NV_RX_DIV_CTRL_I nv item. Modifies the Main and Rx diversity settings for CDMA, HDR, GSM, WCDMA and LTE technologies.
Query Syntax	
Query Response	
Write Syntax	AT$NWDIVCTRL=<setting>,<technology>
Write Response	CDMA=Rx Diversity Enabled HDR=Off GSM=Not Supported WCDMA=Rx Diversity Enabled LTE=Main
Read Syntax	AT$NWDIVCTRL?
Read Response	CDMA=Rx Diversity Enabled HDR=NW_NV_RX_DIV_CTRL_I nv read error GSM=Not Supported WCDMA=Rx Diversity Disabled LTE=NW_NV_RX_DIV_CTRL_I nv read error OK
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <setting>	0 - CDMA 1 - HDR 2 - GSM 3 - WCDMA 4 - LTE
— <technology>	0 - Off 1 - Main 2 - Rx 3 - Both

Notes	
Examples	

AT$NWDLOAD

Command	AT$NWDLOAD
Command Function	Causes device to go into DLOAD mode.
Query Syntax	
Query Response	
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT$NWDLOAD
Execute Response	Device resets and comes up.
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT$NWDYNAMICSTATUS

Command	AT$NWDYNAMICSTATUS
Command Function	Queries dynamic (current) status of device. Information includes network, technology, connection status, signal, roaming, etc.
Query Syntax	
Query Response	
Write Syntax	
Write Response	
Read Syntax	AT$NWDYNAMICSTATUS?
Read Response	<network:Verizon Wireless>,<tech:11>,<connstate:3>,<roam:0>, <rssi:5>,<trafic:0>,<femto:0><simstate:3>, <unreadsms:0>,<gpsstate:1>, <duration:0>,<rx:0>,<tx:0>,<localip:192.168.1.1>
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	This is used in Enterprise Mode.
Examples	

AT$NWERR

Command	AT$NWERR
Command Function	Queries the network error for a data call. Also, enables or disables unsolicited AT events which report a change in network error.
Query Syntax	AT$NWERR=?
Query Response	$NWERR: async on|off
Write Syntax	AT$NWERR=<fun>
Write Response	OK $NWERR: async on
Read Syntax	AT$NWERR?
Read Response	$NWERR: 0
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <cause code>	0 - System OK - No Errors 102 - IMSI Unknown in HLR 103 - Illegal MS 106 - Illegal ME 107 - GPRS Not Allowed 111 - PLMN Not Allowed 112 - Location Area Not Allowed 113 - Roaming Not Allowed 127 - Missing or Unknown APN 129 - User Authentication Failed 131 - Activation Rejected 132 - Option Not Supported 133 - Option Not Subscribed 134 - Option Temporary Out of Order 137 - QOS Not Accepted 139 - Reactivation Required 149 - PDP Authentication Failure Cause codes have been scaled by 100

— <fun>	async off – disable unsolicited event async on – enable unsolicited event async status – query registration status 0 - disable unsolicited event on Status port (legacy) 1 - enable unsolicited event on Status port (legacy)
Notes	
Examples	

AT$NWFID

Command	AT$NWFID
Command Function	
Query Syntax	
Query Response	
Write Syntax	
Write Response	
Read Syntax	AT$NWFID?
Read Response	$NWFID: No FID $NWFID: SS060115900026
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT$NWFOTASTATUS

Command	AT$NWFOTASTATUS
Command Function	Query FOTA status.
Query Syntax	
Query Response	
Write Syntax	
Write Response	
Read Syntax	AT$NWFOTASTATUS?
Read Response	<FOTA status:0>
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <FOTA Status>	0 - No Status 1 - Ready to Install 2 - In Progress 3 - Success 4 - Failure
Notes	This is used in Enterprise Mode.
Examples	

AT$NWFWAPIVER

Command	AT$NWFWAPIVER
Command Function	Retrieves the FW API version of a particular release.
Query Syntax	AT$NWFWAPIVER=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	AT$NWFWAPIVER?
Read Response	$NWFWAPIVER: 1.00
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <API Version>	
Notes	
Examples	

AT$NWHWID

Command	AT$NWHWID
Command Function	Returns the hardware revision ID.
Query Syntax	AT$NWHWID=?
Query Response	
Write Syntax	
Write Response	
Read Syntax	AT$NWHWID?
Read Response	$NWHWID: HW Rev 04
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <HWID>	Hardware Revision ID
Notes	
Examples	

AT$NWICCID

Command	AT$NWICCID
Command Function	Returns the ICCID of the inserted SIM.
Query Syntax	AT$NWICCID=?
Query Response	OK NWICCID: 89148000000007992523
Write Syntax	
Write Response	
Read Syntax	AT$NWICCID?
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <ICCID>	
Notes	
Examples	

AT$NWIMSREGSTATUS

Command	AT$NWIMSREGSTATUS
Command Function	Get the IMS reg status.
Query Syntax	AT$NWIMSREGSTATUS=?
Query Response	NWIMSREGSTATUS: (0-1) 0-IMS unregistered 1-IMS registered
Write Syntax	
Write Response	
Read Syntax	AT$NWIMSREGSTATUS?
Read Response	NWIMSREGSTATUS: 0
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <0>	Not registered
— <1>	Registered
Notes	
Examples	

AT$NWLOCK

Command	AT$NWLOCK
Command Function	Reads lock state. Also, locks or unlocks the device using a 4-digit lock code.
Query Syntax	AT$NWLOCK=?
Query Response	NWLOCK=LOCK CODE[xxxx],LOCK/UNLOCK[1/0]
Write Syntax	AT$NWLOCK=<lock code>,<lock/unlock>
Write Response	OK
Read Syntax	AT$NWLOCK?
Read Response	NWLOCK: 0 [UNLOCKED]
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <Lock Code>	4 digits
— <Lock/Unlock>	0 - Locked 1 - Unlocked
Notes	
Examples	

AT$NWLTEBAND

Command	AT$NWLTEBAND
Command Function	Lists the current LTE band config and preference setting (in hexadecimal format) stored in the NV and EFS file. Also, sets the LTE bandpref and band config to be used by the modem and stores the setting in the NV and EFS file. The format of the new band preference setting must be in hexadecimal.
Query Syntax	AT$NWLTEBAND=?

Query Response	$NWLTEBAND: <band> bit definitions $NWLTEBAND: 00 UL:1920-1980; DL:2110-2170 $NWLTEBAND: 01 UL:1850-1910; DL:1930-1990 $NWLTEBAND: 02 UL:1710-1785; DL:1805-1880 $NWLTEBAND: 03 UL:1710-1755; DL:2110-2155 $NWLTEBAND: 04 UL: 824-849; DL: 869-894 $NWLTEBAND: 05 UL: 830-840; DL: 875-885 $NWLTEBAND: 06 UL:2500-2570; DL:2620-2690 $NWLTEBAND: 07 UL: 880-915; DL: 925-960 $NWLTEBAND: 08 UL:1749.9-1784.9; DL:1844.9-1879.9 $NWLTEBAND: 09 UL:1710-1770; DL:2110-2170 $NWLTEBAND: 10 UL:1427.9-1452.9; DL:1475.9-1500.9 $NWLTEBAND: 11 UL: 698-716; DL: 728-746 $NWLTEBAND: 12 UL: 777-787; DL: 746-756 $NWLTEBAND: 13 UL: 788-798; DL: 758-768 $NWLTEBAND: 14 Reserved $NWLTEBAND: 15 Reserved $NWLTEBAND: 16 UL: 704-716; DL: 734-746 $NWLTEBAND: 17 UL: 815-830; DL: 860-875 $NWLTEBAND: 18 UL: 830-845; DL: 875-890 $NWLTEBAND: 19 UL: 832-862; DL: 791-821 $NWLTEBAND: 20 UL: 1447.9-1462.9; DL: 1495.9-1510.9 $NWLTEBAND: 21 Reserved $NWLTEBAND: 22 Reserved $NWLTEBAND: 23 Reserved $NWLTEBAND: 24 Reserved $NWLTEBAND: 25 Reserved $NWLTEBAND: 26 Reserved $NWLTEBAND: 27 Reserved $NWLTEBAND: 28 Reserved $NWLTEBAND: 29 Reserved $NWLTEBAND: 30 Reserved $NWLTEBAND: 31 Reserved $NWLTEBAND: 32 UL: 1900-1920; DL: 1900-1920 $NWLTEBAND: 33 UL: 2010-2025; DL: 2010-2025 $NWLTEBAND: 34 UL: 1850-1910; DL: 1850-1910 $NWLTEBAND: 35 UL: 1930-1990; DL: 1930-1990 $NWLTEBAND: 36 UL: 1910-1930; DL: 1910-1930 $NWLTEBAND: 37 UL: 2570-2620; DL: 2570-2620 $NWLTEBAND: 38 UL: 1880-1920; DL: 1880-1920 $NWLTEBAND: 39 UL: 2300-2400; DL: 2300-2400 $NWLTEBAND: 40 UL: 2496-2690; DL: 2496-2690 $NWLTEBAND: 41 UL: 3400-3600; DL: 3400-3600 $NWLTEBAND: 42 UL: 3600-3800; DL: 3600-3800
Write Syntax	AT$NWLTEBAND=<bandpref>
Write Response	OK

Read Syntax	AT$NWLTEBAND?
Read Response	$NWLTEBAND: LTE Band Config: 104e LTE Band Pref: 104e
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <bandpref>	
— <bandconfig>	
Notes	
Examples	

AT$NWLTIME

Command	AT$NWLTIME
Command Function	Queries the local date and time.
Query Syntax	AT$NWLTIME=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	AT$NWLTIME?
Read Response	2014.2.4.17.43.59.1.0
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <time>	Returns local date and time in the format: “yyyy.mm.dd.hh.mm.ss.d.ltm” Where : yyyy = year mm =month dd = day hh = hour mm = minutes ss = seconds d = Day of the week.[0..6] Monday..Sunday ltm = local time offset
Notes	
Examples	

AT$NWMCCFILTER

Command	AT$NWMCCFILTER
Command Function	Reads 3GPP Mobile Country Code Filtering Mode.
Query Syntax	AT$NWMCCFILTER=?
Query Response	$NWMCCFILTER: <value> value definition $NWMCCFILTER: 0 3GPP MCC Filter $NWMCCFILTER: 1 NA MCC Filter $NWMCCFILTER: 2 Disable MCC Filter
Write Syntax	AT$NWMCCFILTER=<mode>
Write Response	OK
Read Syntax	AT$NWMCCFILTER?
Read Response	$NWMCCFILTER: 0
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <mode>	0 = 3GPP MCC Filter 1 = NA MCC Filter 2 = Disable MCC Filter
Notes	
Examples	

AT$NWMDN

Command	AT$NWMDN
Command Function	Retrieves Mobile directory number (MDN) from radio if MDN is provisioned.
Query Syntax	AT$NWMDN=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	AT$NWMDN?
Read Response	8584721331
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT$NWMFG

Command	AT$NWMFG
Command Function	Provides the device manufacture date.
Query Syntax	AT$NWMFG=?
Query Response	$NWMFG: <Month> <Day>, <Year>
Write Syntax	
Write Response	
Read Syntax	AT$NWMFG?
Read Response	$NWMFG: Jul 10, 2013
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT$NWMIFIOSSTATUS

Command	AT$NWMIFIOSSTATUS
Command Function	Queries MiFi OS Status.
Query Syntax	
Query Response	
Write Syntax	
Write Response	
Read Syntax	AT$NWMIFIOSSTATUS?
Read Response	<MiFiOS status: 1>
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <status>	0 - Not ready 1 - Ready
Notes	This is used in Enterprise Mode.
Examples	

AT$NWNITZ

Command	AT$NWNITZ
Command Function	Returns the network time, time zone, and daylight savings information (if available).
Query Syntax	AT$NWNITZ=?
Query Response	OK NWNITZ: 16:48:25 02-04-2014 UTZ-8:00
Write Syntax	
Write Response	
Read Syntax	AT$NWNITZ?
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT$NWNN

Command	AT$NWNN
Command Function	Displays the Network Name on which the device is camped if it is camped.
Query Syntax	AT$NWNN=?
Query Response	Verizon
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT$NWNPC

Command	AT$NWNPC
Command Function	Reads and sets values for the list of network lock personalization.
Query Syntax	AT$NWNPC=?
Query Response	$NWNPC: 0 (read), 1 (write), 2 (erase), 3 (set password)
Write Syntax	AT$NWNPC=0
	AT$NWNPC=1, [MCC], [MNC]
	AT$NWNPC=2, [Id]
	AT$NWNPC=3, [PASSWORD]
Write Response	0: 311 480 1: 204 004
	OK
	OK
	+CME ERROR: network personalization PIN required +CME ERROR: operation not allowed +CME ERROR: incorrect password +CME ERROR: not found
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— (1)	=0 Returns <list> in the format of 'Id: MCC MNC'
— (2)	=1, [MCC], [MNC] MCC is mobile country code and MNC is mobile network code from IMSI which are to be locked to network
— (3)	=2, [Id] [Id] is the index of list which is to be removed from the network lock list

— (4)	=3, [PASSWORD] [PASSWORD] is the string of up to 12 characters. It is used to enable/disable network lock personalization by “AT+CLCK” command
Notes	
Examples	

AT$NWNVITEMINACTIVE

Command	AT$NWNVITEMINACTIVE
Command Function	Causes NV item to become inactive.
Query Syntax	
Query Response	
Write Syntax	AT$NWNVITEMINACTIVE=<nv_item_number>
Write Response	OK
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <nv_item_number>	
Notes	
Examples	

AT$NWPINR

Command	AT$NWPINR
Command Function	Reads the number of attempts left on PIN1.
Query Syntax	
Query Response	
Write Syntax	
Write Response	
Read Syntax	AT$NWPINR?
Read Response	NWPINR: PIN1, 3
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT$NWPREFMODE

Command	AT$NWPREFMODE
Command Function	Returns the valid values for the write operation. (0-52) Reads device prefer mode stored in NV item # 00010. Modifies device prefer mode stored in NV item # 00010.
Query Syntax	AT$NWPREFMODE=?
Query Response	OK
Write Syntax	AT$NWPREFMODE =<prefer mode>
Write Response	OK
Read Syntax	AT$NWPREFMODE?
Read Response	$NWPREFMODE: 4,AUTOMATIC
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <prefer mode>	This only modifies the NV Item #00010. Power cycle the device to apply the mode change. 4 - AUTOMATIC 9 - CDMA ONLY 10 - HDR ONLY 13 - GSM ONLY 14 - WCDMA ONLY 19 - CDMA AND HDR ONLY 30 - LTE ONLY
Notes	
Examples	

AT$NWPRI

Command	AT$NWPRI
Command Function	Queries the PRI information and version from NV.
Query Syntax	AT$NWPRI=?
Query Response	$NWPRI: <information>,<version>
Write Syntax	AT$NWPRI="information", "version"
Write Response	OK
Read Syntax	AT$NWPRI?
Read Response	$NWPRI: PRI.90026953 REV 103 MiFi 6620L VERIZON,103
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <information>	NW_PRI_INFO_SIZE = 80 is the maximum length allowed
— <version>	NW_PRI_VERSION_SIZE = 40 is the maximum length allowed
Notes	
Examples	

AT$NWQMICONNECT

Command	AT$NWQMICONNECT
Command Function	Performs QMI connection.
Query Syntax	AT$NWQMICONNECT=?
Query Response	$NWQMICONNECT: techPref,profileID,pDNS,sDNS,pNBNS,sNBNS,APN,IP,authPref,username, password,ip_family_pref
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT$NWQMICONNECT=techPref, profileID, pDNS, sDNS, pNBNS, sNBNS, APN, IP, authPref, username, password, ip_family
Execute Response	OK
Unsolicited Response	
Parameter Values	techPref – Technology preference 3GPP(1)/3GPP2(2) profileID – Profile number 1,2,3,4,5 pDNS – Primay DNS address sDNS – Secondary DNS address pNBNS – Primary NetBIOS address sNBNS – secondary NetBIOS address APN – APN Name to use for connection IP – Static IP to use to connect authPref – Authentication Preference to use PAP(1)/CHAP(2) etc. username – Username to use password – Password to use ip_family – IP family to connect to IPV4(4)/IPV6(6)
Notes	
Examples	

AT$NWQMIDISCONNECT

Command	AT$NWQMIDISCONNECT
Command Function	Performs QMI disconnection.
Query Syntax	
Query Response	
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT$NWQMIDISCONNECT
Execute Response	OK
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT$NWQMISTATUS

Command	AT$NWQMISTATUS
Command Function	Returns the status of the current data connection.
Query Syntax	AT$NWQMISTATUS=?
Query Response	$NWQMISTATUS: QMI_RESULT_SUCCESS:QMI_ERR_NONE QMI State: QMI_WDS_PKT_DATA_DISCONNECTED Call Duration: 0 seconds Call End Reason: 0
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT$NWQMISTATUS
Execute Response	$NWQMISTATUS: QMI_RESULT_SUCCESS:QMI_ERR_NONE QMI State: QMI_WDS_PKT_DATA_DISCONNECTED Call End Reason:24576 Call Duration: 0 seconds
Unsolicited Response	
Parameter Values	QMI Result – QMI_RESULT_SUCCESS/QMI_RESULT_FAILURE QMI Error – Error result from the QMICONNECT operation QMI State – CONNECTED/DISCONNECT – Current state of connection Call End Reason – Reason why the call ended Call Duration – In seconds
Notes	Returns ERROR
Examples	

AT$NWRAT

Command	AT$NWRAT
Command Function	Reads the preferred mode and service domain that is currently set, as well as the current mode and service domain of the modem.
Query Syntax	AT$NWRAT=?
Query Response	$NWRAT: (0-5),(0-2)
Write Syntax	AT$NWRAT?
Write Response	OK
Read Syntax	AT$NWRAT?
Read Response	$NWRAT: 0,2,8
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <mode>	preferred mode 0 - Automatic 1 - GSM only 2 - WCDMA only 3 - LTE only 4 - CDMA (1x) only 5 - HDR only
— <domain>	preferred domain 0 - Circuit-switched only 1 - Packet-switched only 2 - CS and PS

— <currentState>	current state of the modem 0 - Searching 1 - WCDMA CS 2 - WCDMA PS 3 - WCDMA CS and PS 4 - GSM CS 5 - GSM PS 6 - GSM CS and PS 7 - LTE CS 8 - LTE PS 9 - LTE CS and PS 10 - CDMA CS 11 - CDMA PS 12 - CDMA CS and PS 13 - HDR CS 14 - HDR PS 15 - HDR CS and PS
Notes	
Examples	

AT$NWSFEUIMID

Command	AT$NWSFEUIMID
Command Function	Returns the SFEUIMID.
Query Syntax	AT$NWSFEUIMID=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	AT$NWSFEUIMID?
Read Response	$NWSFEUIMID: 0x4c9e4f49a00000
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT$NWSIMCAP

Command	AT$NWSIMCAP
Command Function	Queries to see if UICC card is LTE capable.
Query Syntax	AT$NWSIMCAP=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	AT$NWSIMCAP?
Read Response	$NWSIMCAP
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <Value 1>	LTE Capable - Response when 4G SIM inserted non-LTE Capable - Response when 3G SIM, non-4G SIM, or no SIM inserted
Notes	
Examples	

AT$NWSMSIMSFORMAT

Command	AT$NWSMSIMSFORMAT
Command Function	Gets the MO SMS format when the SMS is expected to go over IMS.
Query Syntax	AT$NWSMSIMSFORMAT=?
Query Response	NWSMSIMSFORMAT: (0,1,0xFF)
Write Syntax	
Write Response	
Read Syntax	AT$NWSMSIMSFORMAT?
Read Response	NWSMSIMSFORMAT: 0
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <Mode>	0 - (3GPP) 1 - (3GPP2) 0xFF - (unknown)
Notes	
Examples	

AT$NWSNAPSHOT

Command	AT$NWSNAPSHOT
Command Function	Used to query values of system parameters like missed_calls (HDR MAC index), mip_rrp_err_code (network error code during MIP origination), curr_pzid (current stored value of Packet Zone ID), pRev (network service protocol revision like IS95A, IS95B, 1X, or ...), wdisable_mask (Current state of all of the inputs in the form of a bitmap used to determine whether the WAN subsystem should be disabled) and hdr_revision (non-zero value means HDR revision A is in use). These are items from the DM command NW_DIAG_NEW_MODEM_ SNAPSHOT_F (20) that are missing from other existing or planned AT commands.
Query Syntax	AT$NWSNAPSHOT=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	AT$NWSNAPSHOT?
Read Response	NWSNAPSHOT: HDR mac index= 0, mip_rrp_err_code= 255, curr_pzid= 0, pRev= 6, wdisable_mask=0, hdr_revision= 0
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT$NWSPPC

Command	AT$NWSPPC
Command Function	Erases the NPC at <index>. Also, reads the network service provider and corporate personalization codes.
Query Syntax	AT$NWSPPC=?
Query Response	$NWSPPC: 0 (read), 1 (write), 2 (erase), 3 (set password)
Write Syntax	
Write Response	OK
Read Syntax	AT$NWSPPC=0
Read Response	$NWSPPC: LIST EMPTY
Execute Syntax	AT$NWSPPC=2, <index>
Execute Response	OK
Unsolicited Response	
Parameter Values	
— <Value 1>	=2, <index> =0 $NWSPPC: <mcc>, <mnc>, <sp> <mcc>: Mobile Country Code <mnc>: Mobile Network Code <sp>: Service Provider Code =1 $NWSPPC: <mcc>, <mnc>, <sp> <mcc>: Mobile Country Code <mnc>: Mobile Network Code <sp>: Service Provider Code
Notes	
Examples	

AT$NWSTATICSTATUS

Command	AT$NWSTATICSTATUS
Command Function	Reads device information. Information such as device model, manufacture, MDN, IMEI, and firmware version.
Query Syntax	
Query Response	
Write Syntax	
Write Response	
Read Syntax	AT$NWSTATICSTATUS?
Read Response	<model:USB620L>,<manufacture:Novatel Wireless>, <mdn:8589001304>,<imei:990000927975187>, <fwver:9x25BEN-2.44.1>,<mifios_ver:1.207>,<config_ver:I14.NVT.USB620.0>,<swver:1.0>
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	This is used in Enterprise mode.
Examples	

AT$NWSTKRSP

Command	AT$NWSTKRSP
Command Function	Selects the type of response (reject or allow) to an OPEN_CHANNEL SIM Toolkit request.
Query Syntax	AT$NWSTKRSP=?
Query Response	$NWSTKRSP:0, (0-1)
Write Syntax	AT$NWSTKRSP?
Write Response	OK
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	=0 , 0 | 1 0 – open channel request (0-1) – (no open channel response , open channel response)
Notes	
Examples	

AT$NWSVN

Command	AT$NWSVN
Command Function	Retrieves the part number, TAC, and SV number from the build release information.
Query Syntax	
Query Response	
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT$NWSVN
Execute Response	$NWSVN: PN = 20420160, Current TAC = 99000094, Current SV = 00 $NWSVN: Table Entry 00 is TAC = 99000094, SV = 00
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT$NWTESTROAM

Command	AT$NWTESTROAM
Command Function	Reads or simulates the roaming condition.
Query Syntax	AT$NWTESTROAM=?
Query Response	AT$NWTESTROAM = 0|1|2|[64~79](on), 65535(off)
Write Syntax	AT$NWTESTROAM=<RI>
Write Response	OK
Read Syntax	AT$NWTESTROAM?
Read Response	$NWTESTROAM = 65535
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <RI>	0 – roam off 1 – roam on 2 – roam blink 65535 – test roam off
Notes	
Examples	

AT$NWTHERM

Command	AT$NWTHERM
Command Function	Returns the temperature compensation factor currently in operation when in 3G service.
Query Syntax	
Query Response	
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT$NWTHERM
Execute Response	$nwtherm: therm:2560 min:0 max:0 (therm-min)/(max-min): 0.000
Unsolicited Response	
Parameter Values	therm:<raw reading from ADC> min: <min scaling factor from NV_THERM_I or default> max:<max scaling factor from NV_THERM_I or default> (therm-min)/(max-min): <calculated scaling factor>
Notes	
Examples	

AT$NWTHERMTEMP

Command	AT$NWTHERMTEMP
Command Function	Reports the temperature in raw ADC uV and deg C of the sensor ID set with the write operation. If not specified, the sensor ID defaults to 0, PA_THERM.
Query Syntax	AT$NWTHERMTEMP=?
Query Response	NWTHERMTEMP: 0 (PA_THERM)
Write Syntax	AT$NWTHERMTEMP=<therm>
Write Response	at$nwthermtemp=0 $NWTHERMTEMP: Sensor set to 0 [PA_THERM]
Read Syntax	AT$NWTHERMTEMP?
Read Response	NWTHERMTEMP: PA_THERM 492028 uV, 47 deg C
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <therm>	0 - PA_THERM 1 - MSM_THERM 2 - BATT_THERM
Notes	
Examples	

AT$NWTIMESINCEBOOTUP

Command	AT$NWTIMESINCEBOOTUP
Command Function	Displays the time in secs since bootup.
Query Syntax	AT$NWTIMESINCEBOOTUP=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	AT$NWTIMESINCEBOOTUP?
Read Response	NWTIMESINCEBOOTUP: 4112
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT$NWWMCNETWORKTYPE

Command	AT$NWWMCNETWORKTYPE
Command Function	Gets the WMC NETWORK TYPE per VZW request.
Query Syntax	AT$NWWMCNETWORKTYPE=?
Query Response	AT$NWWMCNETWORKTYPE=[0-13]
Write Syntax	
Write Response	
Read Syntax	AT$NWWMCNETWORKTYPE?
Read Response	AT$NWWMCNETWORKTYPE= 0:HOME
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <type>	0 - HOME 1 - EXTENDED 2 - ROAM 3 - SEARCHING_CDMA 4 - SEARCHING_GSM 5 - DENIED 6 - NOT_REG 7 - SWITCHING_TECH 8 - SEARCH_EXHAUSTED 9 - SEARCHING_LTE
Notes	
Examples	

AT+CRST

Command	AT+CRST
Command Function	Resets the unit back to factory defaults.
Query Syntax	AT+CRST=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT+CRST
Execute Response	OK
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+ICCID

Command	AT+ICCID
Command Function	Returns the ICCID of the inserted SIM.
Query Syntax	ATICCID=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	ATICCID?
Read Response	NWICCID: 89148000000007992523
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+NWAPNE

Command	AT+NWAPNE
Command Function	Views and edits eHRPD profiles 101 to 104.
Query Syntax	AT+NWAPNE=?
Query Response	NWAPNE: <profile_id=1,2,3,4> <apn> <apn_enabled=True or False> <inactivity_timer=0-4294967296> <pdn_type=V4,V6,V4_V6> <ipv4_primary_dns> <ipv4_secondary_dns> <ipv6_primary_dns> <ipv6_secondary_dns> <rat_type=HRPD or EHRPD or HRPD_EHRPD>
Write Syntax	AT+NWAPNE=<profile_id>, <apn>, <apn_enabled>
Write Response	OK
Read Syntax	AT+NWAPNE?
Read Response	1,vzwims,True,1439,V6,0.0.0.0,0.0.0.0,0:0:0:0:0:0:0:0,0:0:0:0:0:0:0:0,EHRPD 2,vzwadmin,True,1439,V4_ V6,0.0.0.0,0.0.0.0,0:0:0:0:0:0:0:0,0:0:0:0:0:0:0:0,HRPD_ EHRPD 3,vzwinternet,True,1439,V4_V6,0.0.0.0,0.0.0.0,0:0:0:0:0:0:0:0,0:0:0:0:0:0:0:0,HR PD_EHRPD 4,vzwapp,True,1439,V4_V6,0.0.0.0,0.0.0.0,0:0:0:0:0:0:0:0,0:0:0:0:0:0:0:0,HRPD_ EH RPD
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <profile_id>	1 2 3 4

— <apn>	vzwims,vzwadmin,vzwinternet,vzwapp
— <apn_enabled>	True or False
— <inactivity_timer>	0 - 4294967296
— <pdn_type>	V4,V6,V4_V6
— <rat_type>	HRPD or EHRPD or HRPD_EHRPD
Notes	
Examples	

AT+VZWMRUC

Command	AT+VZWMRUC
Command Function	Clears the MRU (Most Recently Used) system list from EFS/flash memory.
Query Syntax	AT+VZWMRUC=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT+VZWMRUC
Execute Response	OK
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+VZWMRUE

Command	AT+VZWMRUE
Command Function	Reads MRU (Most Recently Used) table entry or system list parameters from EFS/flash memory. Also, inserts the RAT (Radio Access Technology), Band, and Channel in the specified slot of MRU table (MRU[entry]).
Query Syntax	AT+VZWMRUE=?
Query Response	VZWMRUE: <ENTRY>,<MODE>,<BAND>,<CHANNEL> VZWMRUE: (0-12),(CDMA,GSM,HDR,LTE,WCDMA),(1-4294967295),(1-4294967295)
Write Syntax	AT+VZWMRUE=<entry>, <rat>, <band>, <chan>
Write Response	OK
Read Syntax	AT+VZWMRUE?
Read Response	VZWMRUE: 1,LTE,4096,16777215 2,Undefined mode: 0 3,Undefined mode: 0 4,Undefined mode: 0 5,Undefined mode: 0 6,Undefined mode: 0 7,Undefined mode: 0 8,Undefined mode: 0 9,Undefined mode: 0 10,Undefined mode: 0 11,Undefined mode: 0 12,Undefined mode: 0
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	0-12
— <entry>	CDMA, GSM, HDR, LTE, WCDMA
— <rat>	1-4294967295
— <band>	1-4294967295
— <chan>	

Notes	
Examples	

AT+VZWRSRP

Command	AT+VZWRSRP
Command Function	Reads Reference Signal Received Power (RSRP).
Query Syntax	
Query Response	
Write Syntax	
Write Response	
Read Syntax	AT+VZWRSRP?
Read Response	VZWRSRP: <physical cell ID> ,<earfcn>, <rsrp> VZWRSRP: 224,5230,"-95.80",224,2325,"-108.20",000,2325,"0.00"
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <physical cell ID>	
— <earfcn>	
— <rsrp>	
Notes	
Examples	

AT+VZWRSRQ

Command	AT+VZWRSRQ
Command Function	Reads Reference Signal Received Quality (RSRQ).
Query Syntax	
Query Response	
Write Syntax	
Write Response	
Read Syntax	AT+VZWRSRQ?
Read Response	VZWRSRQ: <physical cell ID>, <earfcn>, <rsrq> VZWRSRQ: 224,5230,"-12.40",224,2325,"-20.00",000,2325,"0.00"
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <physical cell ID>	
— <earfcn>	
— <rsrq>	
Notes	
Examples	

3

3GPP

AT+CCLK

Command	AT+CCLK
Command Function	Reads or writes real time clock of the device.
Query Syntax	AT+CCLK=?
Query Response	OK
Write Syntax	AT+CCLK=<time>
Write Response	OK
Read Syntax	AT+CCLK?
Read Response	+CCLK: "13/02/04,10:46:13+00”
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <time>	string type value; format is "yy/MM/dd,hh:mm:ss±zz", where characters indicate year (two last digits), month, day, hour, minutes, seconds and time zone (indicates the difference, expressed in quarters of an hour, between the local time and GMT; range -96...+96)
Notes	
Examples	

AT+CEER

Command	AT+CEER
Command Function	Checks the proper return for the command support query (test operation) and returns the Extended Error Report.
Query Syntax	AT+CEER=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT+CEER
Execute Response	+CEER: Regular deactivation
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CEMODE

Command	AT+CEMODE
Command Function	Reads and sets UE Modes of Operation for EPS.
Query Syntax	AT+CEMODE=?
Query Response	+CEMODE: (0-3) OK
Write Syntax	AT+CEMODE=<mode>
Write Response	OK
Read Syntax	AT+CEMODE?
Read Response	+CEMODE: 2 OK
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <mode>	0 - PS mode 2 of operation 1 - CS/PS mode 1 of operation 2 - CS/PS mode 2 of operation 3 - PS mode 1 of operation
Notes	
Examples	

AT+CEREG

Command	AT+CEREG
Command Function	Queries and reads EPS Network Registration Status and Supported list test command. EPS Network Registration Status- default state check
Query Syntax	AT+CEREG=?
Query Response	+CEREG: (0-2)
Write Syntax	AT+CEREG=<n>
Write Response	OK
Read Syntax	AT+CEREG?
Read Response	+CEREG: 0,1
Execute Syntax	AT+CEREG
Execute Response	OK
Unsolicited Response	
Parameter Values	
— <n>, <status>	0 - disable network registration unsolicited result code 1 - enable network registration unsolicited result code 2 - enable network registration and local information unsolicited result code
Notes	
Examples	

AT+CFUN

Command	AT+CFUN
Command Function	Reads and sets Phone Functionality and integer range support.
Query Syntax	AT+CFUN=?
Query Response	+CFUN: (0-1,4-7),(0-1)
Write Syntax	AT+CFUN=<fun>, <rst>
Write Response	OK
Read Syntax	AT+CFUN?
Read Response	+CFUN: 1
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <fun>	Phone Functionality: 0 - minimum functionality 1 - normal functionality 4 - disable phone both transmit and receive RF circuits 5 - factory test mode 6 - reset UE 7 - offline mode All other values below 128 are reserved.
— <rst>	Integer range support: 0 - do not reset the MT before setting it to <fun> power level, this is default value 1 - reset the MT before setting it to <fun> power level
Notes	
Examples	

AT+CGACT

Command	AT+CGACT
Command Function	Activates or deactivates a specific PDP context. PDP Context Activates for CID 1 confirmation.
Query Syntax	AT+CGACT=?
Query Response	+CGACT: (0,1)
Write Syntax	AT+CGACT=<state>, <cid>
Write Response	OK
Read Syntax	AT+CGACT?
Read Response	+CGACT: 1,1 +CGACT: 2,0 +CGACT: 3,0 +CGACT: 4,0
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <state>	
— <cid>	
Notes	
Examples	

AT+CGCMOD

Command	AT+CGCMOD
Command Function	List of <cid>s associated with active contexts. PDP context activates or deactivates.
Query Syntax	AT+CGCMOD=?
Query Response	+CGCMOD: (3,6)
Write Syntax	AT+CGMOD=<cid>,<cid>,…
Write Response	OK
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CGDCONT

Command	AT+CGDCONT
Command Function	Defines PDP Context, reads PDP context provisioned in the device, and changes PDP context by Channel Identifier 1.
Query Syntax	AT+CGDCONT=?
Query Response	+CGDCONT: (1-16),"IP",,,(0-2),(0-4) +CGDCONT: (1-16),"PPP",,,(0-2),(0-4) +CGDCONT: (1-16),"IPV6",,,(0-2),(0-4) +CGDCONT: (1-16),"IPV4V6",,,(0-2),(0-4)
Write Syntax	AT+CGDCONT=<cid>, <pdp type>, <apn>, <pdp addr>, <d_comp>, <h_comp>
Write Response	OK
Read Syntax	AT+CGDCONT?
Read Response	+CGDCONT: 1,"IPV6","vzwims","0.0.0.0",0,0 +CGDCONT: 2,"IPV4V6","vzwadmin","0.0.0.0",0,0 +CGDCONT: 3,"IPV4V6","vzwinternet","0.0.0.0",0,0 +CGDCONT: 4,"IPV4V6","vzwapp","0.0.0.0",0,0
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	=<cid>, <pdp type>, <apn>, <pdp addr>, <d_comp>, <h_comp>
Notes	
Examples	

AT+CGDSCONT

Command	AT+CGDSCONT
Command Function	Defines Secondary PDP Context, reads Secondary PDP context state, and changes Secondary PDP Context.
Query Syntax	AT+CGDSCONT=?
Query Response	at+cgdscont=? +CGDSCONT: (1-16),(1,2,3,4),"IP",,,(0-2),(0-4) +CGDSCONT: (1-16),(1,2,3,4),"PPP",,,(0-2),(0-4) +CGDSCONT: (1-16),(1,2,3,4),"IPV6",,,(0-2),(0-4) +CGDSCONT: (1-16),(1,2,3,4),"IPV4V6",,,(0-2),(0-4)
Write Syntax	AT+CGDSCONT=<cid>, <p_cid>, <d_comp>, <h_comp>, <im_cm_signalling_flag>
Write Response	OK
Read Syntax	AT+CGDSCONT?
Read Response	+CGDSCONT: (6)
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	=<cid>, <p_cid>, <d_comp>, <h_comp>, <im_cm_signalling_flag>
Notes	
Examples	

AT+CGEQOSRDP

Command	AT+CGEQOSRDP
Command Function	EPS Quality Of Service Reads Dynamic Parameters.
Query Syntax	AT+CGEQOSRDP=?
Query Response	OK
Write Syntax	AT+CGEQOSRDP=<cid>
Write Response	OK
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CGEREP

Command	AT+CGEREP
Command Function	Packet Domain Event Reporting - Queries the current mode and buffers the value.
Query Syntax	AT+CGEREP=?
Query Response	+CGEREP: (0-2),(0-1)
Write Syntax	AT+CGEREP=<mode>, <bfr>
Write Response	OK
Read Syntax	AT+CGEREP?
Read Response	2,1
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <mode>	
— <bfr>	
Notes	
Examples	

AT+CGMI

Command	AT+CGMI
Command Function	Checks proper return for command support query (test operation) and requests manufacturer ID.
Query Syntax	AT+CGMI=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT+CGMI
Execute Response	Novatel Wireless Incorporated
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CGMM

Command	AT+CGMM
Command Function	Checks the proper return for command support query (test operation) and requests to identify the specific model of the device.
Query Syntax	AT+CGMM=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT+CGMM
Execute Response	USB 620L
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CGMR

Command	AT+CGMR
Command Function	Checks the proper return for command support query (test operation) and requests the version, revision level, and date of the device.
Query Syntax	AT+CGMR=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT+CGMR
Execute Response	2.02+ SVN 0 [Jan 27 2014 17:51:27] (Engineering Build - FW123_)
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CGPADDR

Command	AT+CGPADDR
Command Function	Shows PDP Address for the corresponding CID.
Query Syntax	AT+CGPADDR=?
Query Response	+CGPADDR: (1,2,3,4)
Write Syntax	AT+CGPADDR=<cid>
Write Response	+CGPADDR: 3,0.0.0.0
Read Syntax	
Read Response	
Execute Syntax	AT+CGPADDR
Execute Response	CGPADDR: 3,10.161.97.215,38.0.16.19.176.3.33.32.0.0.0.55.198.65.12.1
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CGPIAF

Command	AT+CGPIAF
Command Function	Reads IP Address Format, determines what format to print IPV6 address parameters of other AT commands, and reports Mobile Termination Error-Change result code to numeric value.
Query Syntax	AT+CGPIAF=?
Query Response	+CGPIAF: (0-1),(0-1),(0-1),(0-1)
Write Syntax	AT+CGPIAF=[<IPv6_AddressFormat>[,<IPv6_SubnetNotation>[,<IPv6_LeadingZeros>[,<IPv6_CompressZeros>]]]]
Write Response	OK
Read Syntax	AT+CGPIAF?
Read Response	+CGPIAF: 0,0,0,0
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CGREG

Command	AT+CGREG
Command Function	Reads and writes GPRS network registration status.
Query Syntax	AT+CGREG=?
Query Response	+CGREG: (0-2)
Write Syntax	AT+CGREG=<n>, <status>
Write Response	OK
Read Syntax	AT+CGREG?
Read Response	+CGREG: 0,1
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CGSMS

Command	AT+CGSMS
Command Function	Selects Service for MO SMS Messages and sets Service option.
Query Syntax	AT+CGSMS=?
Query Response	+CSMS: (0-3)
Write Syntax	AT+CGSMS=<service>
Write Response	OK
Read Syntax	AT+CGSMS?
Read Response	+CSMS: 1
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <service>	0 - packet domain 1 - circuit switched 2 - packet domain prefer 3 - circuit switched prefer
Notes	
Examples	

AT+CGSN

Command	AT+CGSN
Command Function	Checks the proper return for command support query (test operation) and requests product serial number ID (IMEI for LTE or ESN number).
Query Syntax	AT+CGSN=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT+CGSN
Execute Response	0x809BEC80
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CGTFT

Command	AT+CGTFT
Command Function	Traffic Flow Template with Command Support Check. Queries and writes TFT values.
Query Syntax	AT+CGTFT=?
Query Response	+CGTFT: "IP",(1-16),(0-255),,(0-255),(0-65535.0-65535),(0-65535.0-65535),(0-FFFFFFFF),(0-255.0-255),(0-FFFFF) +CGTFT: "PPP",(1-16),(0-255),,(0-255),(0-65535.0-65535),(0-65535.0-65535),(0-FFFFFFFF),(0-255.0-255),(0-FFFFF) +CGTFT: "IPV6",(1-16),(0-255),,(0-255),(0-65535.0-65535),(0-65535.0-65535),(0-FFFFFFFF),(0-255.0-255),(0-FFFFF) +CGTFT: "IPV4V6",(1-16),(0-255),,(0-255),(0-65535.0-65535),(0-65535.0-65535),(0-FFFFFFFF),(0-255.0-255),(0-FFFFF)
Write Syntax	AT+CGTFT=<cid>, <packet filter id>, <evaluation precedence index>, <source address and subnet mask>, <protocol number>, <destination port range>, <source port range>, <ipsec security parameter index>, <type of service>, <flow lable>, <direction>
Write Response	OK
Read Syntax	AT+CGTFT?
Read Response	+CGTFT:
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	<cid>, <packet filter id>, <evaluation precedence index>, <source address and subnet mask>, <protocol number>, <destination port range>, <source port range>, <ipsec security parameter index>, <type of service>, <flow lable>, <direction>
Notes	
Examples	

AT+CGTFTRDP

Command	AT+CGTFTRDP
Command Function	Traffic Flow Template that reads Dynamic Parameters.
Query Syntax	AT+CGTFTRDP=?
Query Response	OK
Write Syntax	AT+CGTFTRDP=<cid>
Write Response	OK
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CIMI

Command	AT+CIMI
Command Function	Checks the proper return for command support query (test operation) and returns IMSI value of the SIM inserted in the DUT.
Query Syntax	AT+CIMI=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT+CIMI
Execute Response	311480083505147
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CIND

Command	AT+CIND
Command Function	Reads the value of the indicator in the device.
Query Syntax	AT+CIND=?
Query Response	+CIND: ("battchg",(0-5)),("signal",(0-5)),("service",(0-1)),("call",(0-1)),("roam",(0-1)),("smsfull",(0-1)),("GPRS coverage",(0-1)),("callsetup",(0-3))
Write Syntax	
Write Response	
Read Syntax	AT+CIND?
Read Response	CIND: ,5,1,1,0,0,1,0
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	battchg - battery charge level - 0 5 signal - signal quality - 0 5 service - service availability - 0 1 call - call in progress - 0 1 roam - roaming indicator - 0 1 smsfull - a short message memory full - 0-1 GPS coverage - GPS coverage - 0 1 callsetup - call setup indicator - 0-3
Notes	
Examples	

AT+CLAC

Command	AT+CLAC
Command Function	Lists available AT Commands.
Query Syntax	AT+CLAC=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT+CLAC
Execute Response	<All support AT commands list>
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CLCK

Command	AT+CLCK
Command Function	Facility Lock -Support Check - Locks, unlocks, or interrogates a device or network facility.
Query Syntax	AT+CLCK=?
Query Response	+CLCK: ("AB","AC","AG","AI","AO","IR","OI","OX","SC","FD","PN","PU","PP","PC","PF")
Write Syntax	AT+CLCK=<fac>, <mode>, <passwd>, <class>
Write Response	+CLCK: 0
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <fac>	values reserved. AB - All Barring services AC - All inComing barring services AG - All outGoing barring services AI - BAIC (Barr All Incoming Calls) AO - BAOC (Barr All Outgoing Calls) IR - BIC Roam (Barr Incoming Calls when Roaming outside the home country) OI - BOIC (Barr Outgoing International Calls) OX - BOIC exHC (Barr Outgoing International Calls except to Home Country) SC - SIM (lock SIM/UICC card installed in the currently selected card slot) (SIM/UICC asks password in the device power up and when this lock command issued) FD - SIM card or active application in the UICC (GSM or USIM) fixed dialling memory feature (if PIN2 authentication has not been done during the current session, PIN2 is required as <passwd>) PN - Network Personalization PU - network sUbset Personalization PP - service Provider Personalization PC - Corporate Personalization PF - lock Phone to the very First inserted SIM/UICC card (also referred in the present document as PH-FSIM) (MT asks password when other than the first SIM/UICC card is inserted)

— <mode>	(integer type) 0 - unlock 1 - lock 2 - query status
— <status>	(integer type) 0 - not active 1 - active
— <passwd>	(string type) Same as password specified for the facility from the device user interface or with command Change Password +CPWD
— <class>	sum of integers each representing a class of information (default 7 - voice, data and fax): 1 - voice (telephony) 2 - data (all bearer services; with <mode>=2 this may refer only to some bearer service if TA does not support values 16, 32, 64 and 128) 4 - fax (facsimile services) 8 - short message service 16 - data circuit sync 32 - data circuit async 64 - dedicated packet access 128 - dedicated PAD access
Notes	
Examples	

AT+CMEC

Command	AT+CMEC
Command Function	Reads the Mobile Termination Control Mode.
Query Syntax	AT+CMEC=?
Query Response	+CMEC: (0-2),(0),(0),(0-2)
Write Syntax	AT+CMEC=[<keyp> [,<disp> [,<ind> [,<tscrn>]]]
Write Response	+CMEC: OK
Read Syntax	AT+CMEC?
Read Response	? <keyp>, <disp>, <ind>, <tscrn>
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <keyp>	(Integer type) 0 - device can be operated only through its keypad 1 - device can be operated only from TE 2 - device can be operated from both MT keypad and TE
— <disp>	(Integer value) 0
— <ind>	(Integer value) 0
— <tscrn>	(Integer type) 0 - only the device can set the status of its indicators 1 - only TE can set the status of the device indicators 2 - device indicators can be set by both the deviceand TE
Notes	
Examples	

AT+CMEE

Command	AT+CMEE
Command Function	Reports the Mobile Termination Error for Command Support Check and for the query existing mobile termination state.
Query Syntax	AT+CMEE=?
Query Response	+CMEE: (0,1,2)
Write Syntax	AT+CMEE=<n>
Write Response	OK
Read Syntax	AT+CMEE?
Read Response	2
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <n>	0 - disable +CME Error 1 - enable +CME Error – use numeric value 2 - enable +CME Error – use verbose value
Notes	
Examples	

AT+CMER

Command	AT+CMER
Command Function	Reads and writes Mobile Terminated Event Reporting of the supported list, default, and mode change.
Query Syntax	AT+CMER=?
Query Response	+CMER: (0-3),(0),(0),(0-1),(0-1)
Write Syntax	AT+CMER=<mode>
Write Response	OK
Read Syntax	AT+CMER?
Read Response	+CMER: 0,0,0,0,0
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CMGD

Command	AT+CMGD
Command Function	Deletes messages.
Query Syntax	AT+CMGD=?
Query Response	+CMGD: (),(0-4)
Write Syntax	AT+CMGD=<index>[,<delflag>]
Write Response	OK
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <delflag>	0 - (or omitted) Delete the message specified in <index> 1 - Delete all read messages from preferred message storage, leaving unread messages and stored mobile originated messages (whether sent or not) untouched 2 - Delete all read messages from preferred message storage and sent mobile originated messages, leaving unread messages and unsent mobile originated messages untouched 3 - Delete all read messages from preferred message storage, sent and unsent mobile originated messages leaving unread messages untouched. 4 - Delete all messages from preferred message storage including unread messages.
Notes	
Examples	

AT+CMGF

Command	AT+CMGF
Command Function	Reads and sets the Message Format.
Query Syntax	AT+CMGF=?
Query Response	+CMGF: (0-1)
Write Syntax	AT+CMGF=<mode>
Write Response	OK
Read Syntax	AT+CMGF?
Read Response	+CMGF: 1
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <mode>	0 - PDU mode (default when implemented) 1 - text mode
Notes	
Examples	

AT+CMGL

Command	AT+CMGL
Command Function	Lists the messages.
Query Syntax	AT+CMGL=?
Query Response	OK
Write Syntax	AT+CMGL=<status>
Write Response	+CMGL: 0,"REC UNREAD","1234567890",,"80/01/04,00:00:00+00"
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <status>	0 - REC UNREAD received unread message 1 - REC READ received read message 2 - STO UNSENT stored unsent message 3 - STO SENT stored sent message 4 - ALL all messages
Notes	
Examples	

AT+CMGR

Command	AT+CMGR
Command Function	Reads the Messages
Query Syntax	AT+CMGR=?
Query Response	OK
Write Syntax	AT+CMGR=<index>
Write Response	+CMGR: "STO UNSENT","858", this is test
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CMGS

Command	AT+CMGS
Command Function	Sends the Messages
Query Syntax	AT+CMGS=?
Query Response	OK
Write Syntax	AT+CMGS=<da>[,<toda>]<CR> text is entered<ctrl-Z/ESC>
Write Response	
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <da>	text is entered<ctrl-Z/ESC> TP-Destination-Address Address-Value field in (string format).
— <toda>	TP-Destination-Address Type-of-Address (octet in integer format).
Notes	
Examples	

AT+CMGW

Command	AT+CMGW
Command Function	Writes the Messages to Memory.
Query Syntax	AT+CMGW=?
Query Response	OK

Write Syntax	AT+CMGW=
	if text mode (+CMGF=1):
	+CMGW[=<oa/da>[,<tooa/toda>[,<stat>]]]<CR>
	text is entered<ctrl-Z/ESC>
	if PDU mode (+CMGF=0):
	+CMGW=<length>[,<stat>]<CR>PDU is given<ctrl-Z/ESC>

Write Response	+CMGW: 0
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CMSS

Command	AT+CMSS
Command Function	Sends message from storage.
Query Syntax	AT+CMSS=?
Query Response	OK
Write Syntax	AT+CMSS=<index>
Write Response	
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CNUM

Command	AT+CNUM
Command Function	Returns identify subscriber number MSISDN that is assigned to the device.
Query Syntax	AT+CNUM=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT+CNUM
Execute Response	+CNUM: "Line 1","+18588880718",145
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+COPN

Command	AT+COPN
Command Function	Reads and displays the Operator Names.
Query Syntax	AT+COPN=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT+COPN
Execute Response	+COPN: "90111","Inmarsat" +COPN: "90112","MCP Maritime Com" +COPN: "90114","AeroMobile" +COPN: "90115","OnAir" +COPN: "90117","Navitas" +COPN: "90121","Seanet" +COPN: "90126","TIMisea
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+COPS

Command	AT+COPS
Command Function	Reads and writes the PLMN Selection.
Query Syntax	AT+COPS=?
Query Response	at+cops=? +COPS: (2,"Verizon Wireless","","311480",7) (1,"AT&T","AT&T","310410",0) (1,"001 010","001 010","001010",7) (1,"T-Mobile","T-Mobile","310260",7) (1,"AT&T","AT&T","310410",2) (1,"T-Mobile","T-Mobile","310260",2) (1,"311 660","311 660","311660",7) ,(0,1,2,3,4),(0,1,2) OK
Write Syntax	AT+COPS=[<mode>[,<format>[,<oper>[,<AcT>]]]]
Write Response	OK
Read Syntax	AT+COPS?
Read Response	+COPS: 0,0,"Verizon Wireless",7
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <mode>	(integer type) 0 - automatic (<oper> field is ignored) 1 - manual (<oper> field shall be present, and <AcT> optionally) 2 - deregister from network 3 - set only <format> (for read command +COPS?), do not attempt registration/deregistration (<oper> and <AcT> fields are ignored); this value is not applicable in read command response 4 - manual/automatic (<oper> field shall be present); if manual selection fails, automatic mode (<mode>=0) is entered

— <format>	(integer type) circuit mode registration status 0 - long format alphanumeric <oper> 1 - short format alphanumeric <oper> 2 - numeric <oper>
— <oper>	(string type) two byte location area code (when <AcT> indicates value 0 to 6), or tracking area code (when <AcT> indicates value 7). In hexadecimal format (e.g. "00C3" equals 195 in decimal).
— <AcT>	(integer type) access technology selected 0 - GSM 1 - GSM Compact 2 - UTRAN 3 - GSM w/EGPRS (see NOTE 1) 4 - UTRAN w/HSDPA (see NOTE 2) 5 - UTRAN w/HSUPA (see NOTE 2) 6 - UTRAN w/HSDPA and HSUPA (see NOTE 2) 7 - E-UTRAN
Notes	
Examples	

AT+CPAS

Command	AT+CPAS
Command Function	Phone Activity Status Phone Activity Status-Current
Query Syntax	AT+CPAS=?
Query Response	+CPAS: (0,3,4)
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	AT+CPAS
Execute Response	+CPAS: 0
Unsolicited Response	
Parameter Values	Response: 0 - ready 3 - unavailable 4 - phone in progress
Notes	
Examples	

AT+CPIN

Command	AT+CPIN
Command Function	CPIN test mode state.
Query Syntax	AT+CPIN=?
Query Response	OK
Write Syntax	
Write Response	
Read Syntax	AT+CPIN?
Read Response	+CPIN: READY
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CPMS

Command	AT+CPMS
Command Function	Reads and sets the Preferred Message Storage.
Query Syntax	AT+CPMS=?
Query Response	CPMS: ("SM","SR"),("SM","SR"),("SM","SR")
Write Syntax	AT+CPMS=<code>
Write Response	+CPMS: 0,15,0,15,0,15
Read Syntax	AT+CPMS?
Read Response	+CPMS: "SM",0,15,"SM",0,15,"SM",0,15
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CPWD

Command	AT+CPWD
Command Function	Changes the Password for the facility lock.
Query Syntax	AT+CPWD=?
Query Response	+CPWD: ("AB",4),("AC",4),("AG",4),("AI",4),("AO",4),("IR",4),("OI",4),("OX",4), ("SC",8),("P2",8)
Write Syntax	AT+CPWD=<fac>, <oldpwd>, <newpwd>
Write Response	OK
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <fac>	(Values reserved) AB - All Barring services AC - All inComing barring services AG - All outGoing barring services AI - BAIC (Barr All Incoming Calls) AO - BAOC (Barr All Outgoing Calls) IR - BIC Roam (Barr Incoming Calls when Roaming outside the home country) OI - BOIC (Barr Outgoing International Calls) OX - BOIC exHC (Barr Outgoing International Calls except to Home Country) SC - SIM (lock SIM/UICC card installed in the currently selected card slot) (SIM/UICC asks password in MT power up and when this lock command issued) "P2" SIM PIN2
— <oldpwd>	(String type)
— <newpwd>	(String type) maximum length of password can be determined with <pwdlength>
Notes	
Examples	

AT+CRSM

Command	AT+CRSM
Command Function	Restricts the SIM access, status request via 178 Read Record command.
Query Syntax	AT+CRSM=?
Query Response	OK
Write Syntax	AT+CRSM=<command>, <fileid>, <P1>, <P2>, <P3>, <data>, <pathid>
Write Response	+CRSM: 97,21,"6222820542210027028302 6F40A503"
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+CSCA

Command	AT+CSCA
Command Function	Reads and sets the Service Centre Address.
Query Syntax	AT+CSCA=?
Query Response	OK
Write Syntax	AT+CSCA=<sca>, <tosca>
Write Response	OK
Read Syntax	AT+CSCA?
Read Response	+CSCA: "+19037029920",145
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <sca>	SC address Address-Value (field in string format).
— <tosca>	SC address Type-of-Address (octet in integer format) default is 145, otherwise the default is 129.
Notes	
Examples	

AT+CSCS

Command	AT+CSCS
Command Function	Returns supported character sets available by the DUT. Returns current character set in use and changes the TE character set.
Query Syntax	AT+CSCS=?
Query Response	+CSCS: ("IRA","GSM","UCS2")
Write Syntax	AT+CSCS=<character set>
Write Response	OK
Read Syntax	AT+CSCS?
Read Response	"IRA"
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <character set>	IRA - International reference alphabet GSM - 7bit default alphabet UCS2 - 16-bit universal multiple-octet coded character set
Notes	
Examples	

AT+CSIM

Command	AT+CSIM
Command Function	Generic SIM Access; directs the control of a SIM inserted in the device.
Query Syntax	AT+CSIM=?
Query Response	OK
Write Syntax	AT+CSIM=<length>, <command>
Write Response	+CSIM: 4,"6E00"
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <length>	
— <command>	
Notes	
Examples	

AT+CSMP

Command	AT+CSMP
Command Function	Reads and sets Text Mode Parameters.
Query Syntax	AT+CSMP=?
Query Response	OK
Write Syntax	AT+CSMP=<fo>[,<vp>[,<pid>[,<dcs>]]]
Write Response	OK
Read Syntax	AT+CSMP?
Read Response	+CSMP: 17,167,0,0
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <fo>	
— <pid>	
— <dcs>	
Notes	
Examples	

AT+CSMS

Command	AT+CSMS
Command Function	Queries and sets the Select Message Service
Query Syntax	AT+CSMS=?
Query Response	CSMS: (0-1)
Write Syntax	AT+CSMS=<mode>
Write Response	CSMS: 1 , 0 , 0
Read Syntax	AT+CSMS?
Read Response	CSMS: 0 , 1 , 0 , 0
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <mode>	0 - packet domain 1 - circuit switched
— <Value 2>	<MT>, <MO> , <BM>, <CB>
Notes	
Examples	

AT+CSQ

Command	AT+CSQ
Command Function	Requests signal strength indication and channel bit error rate from the device.
Query Syntax	AT+CSQ=?
Query Response	CSQ: (0-31,99),(0-7,99)
Write Syntax	
Write Response	
Read Syntax	AT+CSQ?
Read Response	CSQ: 28,99
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <rssi>	Signal strength indication (0-31, 99)
— <ber>	bit error rate (0-7, 99)
Notes	
Examples	

AT+CSS

Command	AT+CSS
Command Function	Queries the Serving System
Query Syntax	AT+CSS?
Query Response	1,A,275 OK
Write Syntax	
Write Response	
Read Syntax	
Read Response	
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <bandclass>	(integer type) 0 - other band class 1 - Band Class 0: U.S. Cellular band (800 MHz). 2 - Band Class 1: U.S.
— <band>	A - Block A B - Block B, C- Block C, D - Block D, F - Block F, Z - Other block.
— <sid>	(Integer value) 0-32767 if err, the value is 99999
Notes	
Examples	

AT+CSTF

Command	AT+CSTF
Command Function	Reads the time format
Query Syntax	AT+CSTF=?
Query Response	CSTF: (1,2)
Write Syntax	AT+CSTF=<format>
Write Response	OK
Read Syntax	AT+CSTF?
Read Response	+CSTF: 1
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <format>	1=HH:MM 2=HH:MM a.m/p.m
Notes	
Examples	

AT+GCATT

Command	AT+GCATT
Command Function	PS Attach Or Detach state list supported **NOTE:** PS Attach Or Detach. Dut must be attached to network before this is run. Attach or detach the device from the Packet Domain service
Query Syntax	AT+GCATT=?
Query Response	+CGATT: (0,1)
Write Syntax	AT+GCATT=<state>
Write Response	OK
Read Syntax	AT+GCATT?
Read Response	+CGATT: 1
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <state>	0 - detached 1 - attached
Notes	
Examples	

AT+WS46

Command	AT+WS46
Command Function	PCCA STD 101 [17] select wireless network. Set command selects the WDS side stack <n> to be used by the TA. Read command shows current setting and test command displays side stacks implemented in the TA. Network in which TA can operate, where 25 is 3GPP Systems (GERAN, UTRAN and E-UTRAN).
Query Syntax	AT+WS46=?
Query Response	+WS46: (12,22,25,28,29)
Write Syntax	AT+WS46=<network>
Write Response	OK
Read Syntax	AT+WS46?
Read Response	25
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
— <network>	12=GERAN only 22=UTRAN only 25=3GPP system (GERAN, UTRAN, E-UTRAN) 28=E-UTRAN only 29=GERAN and UTRAN
Notes	
Examples	

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VZW

AT+VZWAPNE

Command	AT+VZWAPNE
Command Function	Views or edits APN settings.
Query Syntax	AT+VZWAPNE=?
Query Response	VZWAPNE:WAPN 0,1,2,3,4 APNCLASS: 1,2,3,4 APNNI:vzwims,vzwinternet,vzwadmin,vzwapp APNTYPE:IPV4,IPV6,IPV4V6 APNB:LTE APNED:Enabled,Disabled APNTIME:0-4294967296 OK
Write Syntax	OK
Write Response	AT+VZWAPNE=<wapn>,<apnclass>,<APN name>,<PDN type>,<technology>,<Enabled/Disabled>,<Inactivity timer>
Read Syntax	AT+VZWAPNE?
Read Response	1,,IPV4V6,LTE,Enabled,8640 2,,IPV4V6,LTE,Enabled,8640 3,,IPV4V6,LTE,Enabled,8640 4,,IPV4V6,LTE,Enabled,8640 OK
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+VZWRSRP

Command	AT+VZWRSRP
Command Function	Reads RSRP value.
Query Syntax	
Query Response	
Write Syntax	
Write Response	
Read Syntax	AT+VZWRSRP?
Read Response	VZWRSRP: 224,2325,"-89.80",063,5230,"-102.90",000,5230,"0.00"
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	

AT+VZWRSRQ

Command	AT+VZWRSRQ
Command Function	Reads RSRQ value.
Query Syntax	
Query Response	
Write Syntax	
Write Response	
Read Syntax	AT+VZWRSRQ?
Read Response	VZWRSRQ: 224,2325,"-6.40",063,5230,"-14.00",000,5230,"0.00"
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	
Examples	