USB730L – AT002

Global Modem USB730L

AT Command Reference Guide

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NOVATEL WIRELESS

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Introduction

This document lists and describes the AT Command Set to be used in conjunction with the Novatel Wireless Global Modem USB730L.

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.

AT Command Format

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 Commands

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$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: USB730L Revision: 2.03+ SVN 0 [Feb 4 2014 13:56:48] (Engineering Build - FW123_) SVN: 00 +GCAP: +CLTE1, +CIS707-A, +MS, +ES, +DSVID:PID:RID: 0x1410:0xb00d MEID:0x99000062989008 ESN:0x80226577HWREV: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$NWATR
Command Function	Reads the ATR (answer-to-reset) string from the SIM. Used for the AT+CSIM todetermine the capabilities of the SIM (used by the application
Query Syntax	AT$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>	1 CDMA2000 Band Class 0, A-System 2 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>	1 WLAN US 2400 band 2 WLAN ETSI 2400 band 3 WLAN FRANCE 2400 band 4 WLAN SPAIN 2400 band 5 WLAN JAPAN 2400 band 6 WLAN US 2400 band 7 WLAN EUROPE 5000 band 8 WLAN FRANCE 5000 band 9 WLAN SPAIN 5000 band 10 WLAN JAPAN 5000 band 11 Reserved 12 Reserved 13 Reserved 14 Reserved 15 Reserved 16 Reserved 17 WCDMA EUROPE 2600 band 18 WCDMA EUROPE & JAPAN 900 band 19 WCDMA JAPAN 1700 band 20 Reserved for WLAN 20 Reserved for WLAN 21 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
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$NWDATAUSAGE?
Read Response	<state:0>,<type:Shared>,<limit:100>, <totalusage:0.630>,<lineusage:0.043>, <usagedate:2017-03-12T05:05>,<cycleendday:04/06/2017>,<uint:GB>
Execute Syntax	AT$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$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$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$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$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 USB730L 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$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$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:USB730L>,<manufacture:Novatel Wireless>, <mdn:8589001304>,<imei:990000927975187>, <fwver:9x25BEN-2.44.1>,<mifios_ver:1.207>,<config_ver:I14.NVT.USB730.0>,<swver:1.0>
Execute Syntax	
Execute Response	
Unsolicited Response	
Parameter Values	
Notes	This is used in Enterprise mode.
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$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+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+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 fromEFS/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 Commands

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 localtime 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: (1) – when device is in LTE Idle mode (IMS PDN) +CGCMOD: (1,3) – when device has active data call (IMS + INTERNET PDN)
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 changesPDP 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: (1-24),(2,3,21,22,23),"IP",,,(0-3),(0-4) +CGDSCONT: (1-24),(2,3, 21,22,23),"PPP",,,(0-3),(0-4) +CGDSCONT: (1-24),(2,3, 21,22,23),"IPV6",,,(0-3),(0-4) +CGDSCONT: (1-24),(2,3, 21,22,23),"IPV4V6",,,(0-3),(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: OK
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	USB730L
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>, <sourceaddress 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 andsubnet 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+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,"62228205422100270283026F40A503"
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 only22=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 Commands

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	