

# Global Modem USB730L



## AT Command Reference Guide

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## Introduction

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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

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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.

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

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## **NVTL AT Commands**

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# AT\$CNTI

<b>Command</b>	AT\$CNTI
<b>Command Function</b>	Queries the current network technology.
<b>Query Syntax</b>	AT\$CNTI=?
<b>Query Response</b>	CNTI: (0-2)
<b>Write Syntax</b>	
<b>Write Response</b>	
<b>Read Syntax</b>	AT\$CNTI?
<b>Read Response</b>	\$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
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	0 - <current network access technology - <supported network access technologies> ? - <all supported network access technologies by the device>” where the network access technologies have the following values: GPRS – GPRS network EDGE – Edge networkUMTS – UMTS networkHSDPA – HSDPA network HSUPA – HSUPA networkHSPA+ – HSPA Plus HSPA+DC – HSPA plus DC
<b>Notes</b>	
<b>Examples</b>	

# AT\$NWATI

---

<b>Command</b>	AT\$NWATI
<b>Command Function</b>	Queries the superset of the ATI command and adds some more info to that AT command.
<b>Query Syntax</b>	AT\$NWATI=?
<b>Query Response</b>	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
<b>Write Syntax</b>	
<b>Write Response</b>	
<b>Read Syntax</b>	
<b>Read Response</b>	
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	

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

# AT\$NWATR

---

<b>Command</b>	AT\$NWATR
<b>Command Function</b>	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
<b>Query Syntax</b>	AT\$NWATR=?
<b>Query Response</b>	\$NWATR: <length>, <atr_string>
<b>Write Syntax</b>	
<b>Write Response</b>	
<b>Read Syntax</b>	AT\$NWATR?
<b>Read Response</b>	\$NWATR: 23,3b9f97c00a1fc78031e073fe211b65d0011009228100f2
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
— <length>	
— <atr_string>	
<b>Notes</b>	
<b>Examples</b>	

# AT\$NWBAND

---

<b>Command</b>	AT\$NWBAND
<b>Command Function</b>	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
<b>Query Syntax</b>	AT\$NWBAND=?
<b>Query Response</b>	<band> bit definitions
<b>Write Syntax</b>	=<band_pref>
<b>Write Response</b>	
<b>Read Syntax</b>	AT\$NWBAND?
<b>Read Response</b>	4e80187
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
— <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.

<b>— &lt;band&gt;</b>	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
<b>Notes</b>	
<b>Examples</b>	



# AT\$NWBAND2

---

<b>Command</b>	AT\$NWBAND2
<b>Command Function</b>	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>.
<b>Query Syntax</b>	AT\$NWBAND2=?
<b>Query Response</b>	\$NWBAND2: <band> bit definitions
<b>Write Syntax</b>	
<b>Write Response</b>	
<b>Read Syntax</b>	AT\$NWBAND2?
<b>Read Response</b>	20000
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
— <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
<b>Notes</b>	
<b>Examples</b>	

# AT\$NWCCMAUTOCONNECT

---

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

# AT\$NWCCMCONNECT

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

# AT\$NWCFT

---

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

# AT\$NWCHBAND

---

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

# AT\$NWCID

---

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

# AT\$NWCSLFILTER

---

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



# AT\$NWDATAUSAGE

---

<b>Command</b>	AT\$NWDATAUSAGE
<b>Command Function</b>	Connects to network to start Data Usage query process.
<b>Query Syntax</b>	AT\$NWDATAUSAGE
<b>Query Response</b>	OK
<b>Write Syntax</b>	
<b>Write Response</b>	
<b>Read Syntax</b>	AT\$NWDATAUSAGE?
<b>Read Response</b>	<state:0>,<type:Shared>,<limit:100>, <totalusage:0.630>,<lineusage:0.043>, <usedate:2017-03-12T05:05>,<cycleendday:04/06/2017>,<uint:GB>
<b>Execute Syntax</b>	AT\$NWDATAUSAGE
<b>Execute Response</b>	OK
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
<b>Notes</b>	This is used in Enterprise Mode.
<b>Examples</b>	

# AT\$NWDEGC

---

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

# AT\$NWDYNAMICSTATUS

---

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

# AT\$NWFID

---

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

# AT\$NWFOTASTATUS

---

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

# AT\$NFWAPIVER

---

<b>Command</b>	AT\$NFWAPIVER
<b>Command Function</b>	Retrieves the FW API version of a particular release.
<b>Query Syntax</b>	AT\$NFWAPIVER=?
<b>Query Response</b>	OK
<b>Write Syntax</b>	
<b>Write Response</b>	
<b>Read Syntax</b>	AT\$NFWAPIVER?
<b>Read Response</b>	\$NFWAPIVER: 1.00
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
<b>— &lt;API Version&gt;</b>	
<b>Notes</b>	
<b>Examples</b>	

# AT\$NWHWID

---

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

# AT\$NWICCID

---

<b>Command</b>	AT\$NWICCID
<b>Command Function</b>	Returns the ICCID of the inserted SIM.
<b>Query Syntax</b>	AT\$NWICCID=?
<b>Query Response</b>	OK NWICCID: 8914800000007992523
<b>Write Syntax</b>	
<b>Write Response</b>	
<b>Read Syntax</b>	AT\$NWICCID?
<b>Read Response</b>	
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
— <ICCID>	
<b>Notes</b>	
<b>Examples</b>	



# AT\$NWLTIME

---

<b>Command</b>	AT\$NWLTIME
<b>Command Function</b>	Queries the local date and time.
<b>Query Syntax</b>	AT\$NWLTIME=?
<b>Query Response</b>	OK
<b>Write Syntax</b>	
<b>Write Response</b>	
<b>Read Syntax</b>	AT\$NWLTIME?
<b>Read Response</b>	2014.2.4.17.43.59.1.0
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
<b>— &lt;time&gt;</b>	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
<b>Notes</b>	
<b>Examples</b>	

# AT\$NWMCCFILTER

---

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

# AT\$NWMDN

---

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

# AT\$NWMFG

---

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

# AT\$NWMIFIOSSTATUS

---

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

# AT\$NWNITZ

---

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

# AT\$NWNN

---

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

# AT\$NWPINR

---

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



# AT\$NWPREFMODE

---

<b>Command</b>	AT\$NWPREFMODE
<b>Command Function</b>	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.
<b>Query Syntax</b>	AT\$NWPREFMODE=?
<b>Query Response</b>	OK
<b>Write Syntax</b>	AT\$NWPREFMODE =<prefer mode>
<b>Write Response</b>	OK
<b>Read Syntax</b>	AT\$NWPREFMODE?
<b>Read Response</b>	\$NWPREFMODE: 4,AUTOMATIC
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
<b>— &lt;prefer mode&gt;</b>	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
<b>Notes</b>	
<b>Examples</b>	

# AT\$NWPRI

---

<b>Command</b>	AT\$NWPRI
<b>Command Function</b>	Queries the PRI information and version from NV.
<b>Query Syntax</b>	AT\$NWPRI=?
<b>Query Response</b>	\$NWPRI: <information>,<version>
<b>Write Syntax</b>	AT\$NWPRI="information", "version"
<b>Write Response</b>	OK
<b>Read Syntax</b>	AT\$NWPRI?
<b>Read Response</b>	\$NWPRI: PRI.90026953 REV 103 USB730L VERIZON,103
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
— <information>	NW_PRI_INFO_SIZE = 80 is the maximum length allowed
— <version>	NW_PRI_VERSION_SIZE = 40 is the maximum length allowed
<b>Notes</b>	
<b>Examples</b>	

# AT\$NWRAT

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

<b>— &lt;currentState&gt;</b>	<p>current state of the modem 0 - Searching</p> <ul style="list-style-type: none"> <li>1 - WCDMA CS</li> <li>2 - WCDMA PS</li> <li>3 - WCDMA CS and PS</li> <li>4 - GSM CS</li> <li>5 - GSM PS</li> <li>6 - GSM CS and PS</li> <li>7 - LTE CS</li> <li>8 - LTE PS</li> <li>9 - LTE CS and PS</li> <li>10 - CDMA CS</li> <li>11 - CDMA PS</li> <li>12 - CDMA CS and PS</li> <li>13 - HDR CS</li> <li>14 - HDR PS</li> <li>15 - HDR CS and PS</li> </ul>
<b>Notes</b>	
<b>Examples</b>	

# AT\$NWSFEUIMID

---

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

# AT\$NWSIMCAP

---

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

# AT\$NWSMSIMSFORMAT

---

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

# AT\$NWSTATICSTATUS

---

<b>Command</b>	AT\$NWSTATICSTATUS
<b>Command Function</b>	Reads device information. Information such as device model, manufacture, MDN, IMEI, and firmware version.
<b>Query Syntax</b>	
<b>Query Response</b>	
<b>Write Syntax</b>	
<b>Write Response</b>	
<b>Read Syntax</b>	AT\$NWSTATICSTATUS?
<b>Read Response</b>	<model:USB730L>,<manufacture:Novatel Wireless>, <mdn:8589001304>,<imei:990000927975187>, <fwver:9x25BEN- 2.44.1>,<mifios_ver:1.207>,<config_ver:l14.NVT.USB730.0>,<swver:1.0>
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
<b>Notes</b>	This is used in Enterprise mode.
<b>Examples</b>	



# AT\$NWSVN

---

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

# AT\$NWThermTemp

---

<b>Command</b>	AT\$NWThermTemp
<b>Command Function</b>	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.
<b>Query Syntax</b>	AT\$NWThermTemp=?
<b>Query Response</b>	NWThermTemp: 0 (PA_THERM)
<b>Write Syntax</b>	AT\$NWThermTemp=<therm>
<b>Write Response</b>	at\$nwthermtemp=0 \$NWThermTemp: Sensor set to 0 [PA_THERM]
<b>Read Syntax</b>	AT\$NWThermTemp?
<b>Read Response</b>	NWThermTemp: PA_THERM 492028 uV, 47 deg C
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
<b>— &lt;therm&gt;</b>	0 - PA_THERM 1 - MSM_THERM 2 - BATT_THERM
<b>Notes</b>	
<b>Examples</b>	

# AT\$NWTIMESINCEBOOTUP

---

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

# AT+ICCID

---

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

# AT+VZWMRUC

---

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

# AT+VZWMRUE

<b>Command</b>	AT+VZWMRUE
<b>Command Function</b>	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]).
<b>Query Syntax</b>	AT+VZWMRUE=?
<b>Query Response</b>	VZWMRUE: <ENTRY>,<MODE>,<BAND>,<CHANNEL> VZWMRUE: (0-12),(CDMA,GSM,HDR,LTE,WCDMA),(1-4294967295),(1-4294967295)
<b>Write Syntax</b>	AT+VZWMRUE=<entry>, <rat>, <band>, <chan>
<b>Write Response</b>	OK
<b>Read Syntax</b>	AT+VZWMRUE?
<b>Read Response</b>	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
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	0-12
— <entry>	CDMA, GSM, HDR, LTE, WCDMA
— <rat>	1-4294967295

— <band>	1-4294967295
— <chan>	
Notes	
Examples	

# AT+VZWRSP

---

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



# AT+VZWRSRQ

---

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

# 3

## **3GPP AT Commands**

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# AT+CCLK

---

<b>Command</b>	AT+CCLK
<b>Command Function</b>	Reads or writes real time clock of the device.
<b>Query Syntax</b>	AT+CCLK=?
<b>Query Response</b>	OK
<b>Write Syntax</b>	AT+CCLK=<time>
<b>Write Response</b>	OK
<b>Read Syntax</b>	AT+CCLK?
<b>Read Response</b>	+CCLK: "13/02/04,10:46:13+00"
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
— <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)
<b>Notes</b>	
<b>Examples</b>	

# AT+CEER

---

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

# AT+CEMODE

---

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

# AT+CEREG

---

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

# AT+CFUN

<b>Command</b>	AT+CFUN
<b>Command Function</b>	Reads and sets Phone Functionality and integer range support.
<b>Query Syntax</b>	AT+CFUN=?
<b>Query Response</b>	+CFUN: (0-1,4-7),(0-1)
<b>Write Syntax</b>	AT+CFUN=<fun>, <rst>
<b>Write Response</b>	OK
<b>Read Syntax</b>	AT+CFUN?
<b>Read Response</b>	+CFUN: 1
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
— <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
<b>Notes</b>	
<b>Examples</b>	

# AT+CGACT

---

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



# AT+CGCMOD

---

<b>Command</b>	AT+CGCMOD
<b>Command Function</b>	List of <cid>s associated with active contexts.  PDP context activates or deactivates.
<b>Query Syntax</b>	AT+CGCMOD=?
<b>Query Response</b>	+CGCMOD: (1) – when device is in LTE Idle mode (IMS PDN) +CGCMOD: (1,3) – when device has active data call (IMS + INTERNET PDN)
<b>Write Syntax</b>	AT+CGMOD=<cid>,<cid>,
<b>Write Response</b>	OK
<b>Read Syntax</b>	
<b>Read Response</b>	
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
<b>Notes</b>	
<b>Examples</b>	

# AT+CGDCONT

<b>Command</b>	AT+CGDCONT
<b>Command Function</b>	Defines PDP Context, reads PDP context provisioned in the device, and changes PDP context by Channel Identifier 1.
<b>Query Syntax</b>	AT+CGDCONT=?
<b>Query Response</b>	+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)
<b>Write Syntax</b>	AT+CGDCONT=<cid>, <pdp type>, <apn>, <pdp addr>, <d_comp>, <h_comp>
<b>Write Response</b>	OK
<b>Read Syntax</b>	AT+CGDCONT?
<b>Read Response</b>	+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
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	=<cid>, <pdp type>, <apn>, <pdp addr>, <d_comp>, <h_comp>
<b>Notes</b>	
<b>Examples</b>	

# AT+CGDSCONT

<b>Command</b>	AT+CGDSCONT
<b>Command Function</b>	Defines Secondary PDP Context, reads Secondary PDP context state, and changes Secondary PDP Context.
<b>Query Syntax</b>	AT+CGDSCONT=?
<b>Query Response</b>	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)
<b>Write Syntax</b>	AT+CGDSCONT=<cid>, <p_cid>, <d_comp>, <h_comp>, <im_cm_signalling_flag>
<b>Write Response</b>	OK
<b>Read Syntax</b>	AT+CGDSCONT?
<b>Read Response</b>	+CGDSCONT: OK
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	=<cid>, <p_cid>, <d_comp>, <h_comp>, <im_cm_signalling_flag>
<b>Notes</b>	
<b>Examples</b>	

# AT+CGEQOSRDP

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

# AT+CGEREP

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

# AT+CGMI

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

# AT+CGMM

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<b>Command</b>	AT+CGMM
<b>Command Function</b>	Checks the proper return for command support query (test operation) and requests to identify the specific model of the device.
<b>Query Syntax</b>	AT+CGMM=?
<b>Query Response</b>	OK
<b>Write Syntax</b>	
<b>Write Response</b>	
<b>Read Syntax</b>	
<b>Read Response</b>	
<b>Execute Syntax</b>	AT+CGMM
<b>Execute Response</b>	USB730L
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
<b>Notes</b>	
<b>Examples</b>	

# AT+CGMR

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



# AT+CGPADDR

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

# AT+CGPIAF

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<b>Command</b>	AT+CGPIAF
<b>Command Function</b>	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.
<b>Query Syntax</b>	AT+CGPIAF=?
<b>Query Response</b>	+CGPIAF: (0-1),(0-1),(0-1),(0-1)
<b>Write Syntax</b>	AT+CGPIAF=[<IPv6_AddressFormat>[,<IPv6_SubnetNotation>[,<IPv6_LeadingZeros>[,<IPv6_CompressZeros>]]]]
<b>Write Response</b>	OK
<b>Read Syntax</b>	AT+CGPIAF?
<b>Read Response</b>	+CGPIAF: 0,0,0,0
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
<b>Notes</b>	
<b>Examples</b>	

# AT+CGREG

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

# AT+CGSMS

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

# AT+CGSN

---

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

# AT+CGTFT

<b>Command</b>	AT+CGTFT
<b>Command Function</b>	Traffic Flow Template with Command Support Check. Queries and writes TFT values.
<b>Query Syntax</b>	AT+CGTFT=?
<b>Query Response</b>	+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)
<b>Write Syntax</b>	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>
<b>Write Response</b>	OK
<b>Read Syntax</b>	AT+CGTFT?
<b>Read Response</b>	+CGTFT:
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	<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>
<b>Notes</b>	
<b>Examples</b>	

# AT+CGTFTRDP

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

# AT+CIMI

---

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



# AT+CIND

<b>Command</b>	AT+CIND
<b>Command Function</b>	Reads the value of the indicator in the device.
<b>Query Syntax</b>	AT+CIND=?
<b>Query Response</b>	+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))
<b>Write Syntax</b>	
<b>Write Response</b>	
<b>Read Syntax</b>	AT+CIND?
<b>Read Response</b>	CIND: ,5,1,1,0,0,1,0
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	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
<b>Notes</b>	
<b>Examples</b>	

# AT+CLAC

---

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

# AT+CMEC

<b>Command</b>	AT+CMEC
<b>Command Function</b>	Reads the Mobile Termination Control Mode.
<b>Query Syntax</b>	AT+CMEC=?
<b>Query Response</b>	+CMEC: (0-2),(0),(0),(0-2)
<b>Write Syntax</b>	AT+CMEC=[<keyp> [,<disp> [,<ind> [,<tscrn>]]]
<b>Write Response</b>	+CMEC: OK
<b>Read Syntax</b>	AT+CMEC?
<b>Read Response</b>	? <keyp>, <disp>, <ind>, <tscrn>
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
— <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 device and TE
<b>Notes</b>	
<b>Examples</b>	

# AT+CMEE

---

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

# AT+CMER

---

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

# AT+CMGD

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

# AT+CMGF

---

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

# AT+CMGL

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<b>Command</b>	AT+CMGL
<b>Command Function</b>	Lists the messages.
<b>Query Syntax</b>	AT+CMGL=?
<b>Query Response</b>	OK
<b>Write Syntax</b>	AT+CMGL=<status>
<b>Write Response</b>	+CMGL: 0,"REC UNREAD","1234567890",,"80/01/04,00:00:00+00"
<b>Read Syntax</b>	
<b>Read Response</b>	
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
<b>— &lt;status&gt;</b>	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
<b>Notes</b>	
<b>Examples</b>	



# AT+CMGR

---

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

# AT+CMGS

---

<b>Command</b>	AT+CMGS
<b>Command Function</b>	Sends the Messages
<b>Query Syntax</b>	AT+CMGS=?
<b>Query Response</b>	OK
<b>Write Syntax</b>	AT+CMGS=<da>[,<toda>]<CR> text is entered<ctrl-Z/ESC>
<b>Write Response</b>	
<b>Read Syntax</b>	
<b>Read Response</b>	
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
– <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).
<b>Notes</b>	
<b>Examples</b>	

# AT+CMGW

---

<b>Command</b>	AT+CMGW
<b>Command Function</b>	Writes the Messages to Memory.
<b>Query Syntax</b>	AT+CMGW=?
<b>Query Response</b>	OK
<b>Write Syntax</b>	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>
<b>Write Response</b>	+CMGW: 0
<b>Read Syntax</b>	
<b>Read Response</b>	
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
<b>Notes</b>	
<b>Examples</b>	

# AT+CMSS

---

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

# AT+CNUM

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

# AT+COPN

---

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

# AT+COPS

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

— <b>&lt;format&gt;</b>	(integer type) circuit mode registration status 0 - long format alphanumeric <oper> 1 - short format alphanumeric <oper> 2 - numeric <oper>
— <b>&lt;oper&gt;</b>	(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).
— <b>&lt;AcT&gt;</b>	(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
<b>Notes</b>	
<b>Examples</b>	



# AT+CPAS

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

# AT+CPIN

---

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

# AT+CPMS

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

# AT+CPWD

<b>Command</b>	AT+CPWD
<b>Command Function</b>	Changes the Password for the facility lock.
<b>Query Syntax</b>	AT+CPWD=?
<b>Query Response</b>	+CPWD: ("AB",4),("AC",4),("AG",4),("AI",4),("AO",4),("IR",4),("OI",4),("OX",4), ("SC",8),("P2",8)
<b>Write Syntax</b>	AT+CPWD=<fac>, <oldpwd>, <newpwd>
<b>Write Response</b>	OK
<b>Read Syntax</b>	
<b>Read Response</b>	
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
— <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 <pwlength>
<b>Notes</b>	

<b>Examples</b>	
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# AT+CRSM

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<b>Command</b>	AT+CRSM
<b>Command Function</b>	Restricts the SIM access, status request via 178 Read Record command.
<b>Query Syntax</b>	AT+CRSM=?
<b>Query Response</b>	OK
<b>Write Syntax</b>	AT+CRSM=<command>, <fileid>, <P1>, <P2>, <P3>, <data>, <pathid>
<b>Write Response</b>	+CRSM: 97,21,"62228205422100270283026F40A503"
<b>Read Syntax</b>	
<b>Read Response</b>	
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
<b>Notes</b>	
<b>Examples</b>	

# AT+CSCA

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<b>Command</b>	AT+CSCA
<b>Command Function</b>	Reads and sets the Service Centre Address.
<b>Query Syntax</b>	AT+CSCA=?
<b>Query Response</b>	OK
<b>Write Syntax</b>	AT+CSCA=<sca>, <tosca>
<b>Write Response</b>	OK
<b>Read Syntax</b>	AT+CSCA?
<b>Read Response</b>	+CSCA: "+19037029920",145
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
— <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.
<b>Notes</b>	
<b>Examples</b>	

# AT+CSCS

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



# AT+CSIM

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

# AT+CSMP

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

# AT+CSMS

---

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

# AT+CSQ

---

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

# AT+CSS

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<b>Command</b>	AT+CSS
<b>Command Function</b>	Queries the Serving System
<b>Query Syntax</b>	AT+CSS?
<b>Query Response</b>	1,A,275OK
<b>Write Syntax</b>	
<b>Write Response</b>	
<b>Read Syntax</b>	
<b>Read Response</b>	
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
— <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
<b>Notes</b>	
<b>Examples</b>	

# AT+CSTF

---

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

# AT+GCATT

---

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

# AT+WS46

<b>Command</b>	AT+WS46
<b>Command Function</b>	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).
<b>Query Syntax</b>	AT+WS46=?
<b>Query Response</b>	+WS46: (12,22,25,28,29)
<b>Write Syntax</b>	AT+WS46=<network>
<b>Write Response</b>	OK
<b>Read Syntax</b>	AT+WS46?
<b>Read Response</b>	25
<b>Execute Syntax</b>	
<b>Execute Response</b>	
<b>Unsolicited Response</b>	
<b>Parameter Values</b>	
— <network>	12=GERAN only 22=UTRAN only 25=3GPP system (GERAN, UTRAN, E-UTRAN) 28=E-UTRAN only 29=GERAN and UTRAN
<b>Notes</b>	
<b>Examples</b>	



# 4

## **VZW AT Commands**

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# AT+VZWRSP

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

# AT+VZWRSRQ

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