

Requirement ID	Requirement Title	G18	G20	DELTA	Delta Comments	
					G18	G20
2	PRODUCT FEATURES					
2.1.1	STK	Y	Y	Y		
2.1.2	TCP/UDP IP Connection	N	Y	Y		
2.1.3	Audio	Y	Y	Y		
2.1.4	User-defined Profiles	Y	Y			
2.1.5	USB DATA Session Output Indication Line	N	Y			
2.2	GPRS OPERATION	Y	Y	Y	class 4	class 8
2.3	CSD OPERATION	Y	Y	Y	CBST: (006,007,070,071),(000 ,)(001)	CBST: (000,004,006,007,014,0 68,070,071,075),(000- 001),(000-003)
2.4	MUX INTEGRATION	Y	Y	Y	2 DLC's	4 DLC's
2.5	SHORT MESSAGE SERVICE (SMS)	Y	Y	Y		
2.6	FAX	Y	Y			
2.7	CHARACTER SETS	Y	Y	Y	CSCS: ("GSM", "UCS2", "IRA")	CSCS: ("8859- 1","ASCII","GSM","UCS 2","UTF8")
4	AT COMMANDS REFERENCE					
4.2.1.1	Request Manufacturer ID: +CGMI, +GMI, + FMI	Y	Y	Y		AT+FMI
4.2.1.2	Request Model ID: +CGMM, +GMM, +FMM	Y	Y	Y		AT+FMM
4.2.1.3	Request Revision: +CGMR, +GMR, +FMR	Y	Y	Y		RAT+FMR
4.2.1.4	Request product serial number ID: +CGSN; +GSN	Y	Y			
4.2.1.5	Select TE character set: +CSCS	Y	Y	Y	CSCS: ("GSM", "UCS2", "IRA")	CSCS: ("8859- 1","ASCII","GSM","UCS 2","UTF8")
4.2.1.6	Request IMSI: +CIMI	Y	Y			
4.2.1.7	Request identification information ATI	Y	Y	Y		
4.2.1.8	Request MSISDN(s): +CNUM	Y	Y			
4.2.1.9	List all available AT commands (AT\$)	Y	Y			
4.2.1.10	List all available AT Commands: CLAC	Y	Y			
4.2.2.1	Get Accessory Feature Review: +MAID	N	Y			
4.2.2.2	Get Accessory Protocol Version: +MAPV	N	Y			

4.3.3.1	Dialing - Originate voice/DATA call D	Y	Y			
4.3.3.2	D>, Direct Dialing from Phone Books	Y	Y			
4.3.3.3	Dial last number: ATDL	Y	Y			
4.3.3.4	End call/Hang-up: ATH	Y	Y			
4.3.3.5	Answer Incoming Call ATA	Y	Y			
4.3.3.6	Incoming Call Notification: RING, +CRING	Y	Y			
4.3.3.7	Calling Line Identification: +CLIP	Y	Y			
4.3.3.8	Call Waiting: +CCWA	Y	Y			
4.3.3.9	Call Hold Supplementary Services: +CHLD	Y	Y			
4.3.3.10	Call forwarding and conditions +CCFC	Y	Y			
4.3.3.11	Calling Line Identification Restriction: +CLIR	Y	Y			
4.3.3.12	Select bearer service type: +CBST	Y	Y	Y		CBST: (000,004,006,007,014,068,070,071,075),(000-001),(000-003)
4.3.3.13	Returns to Online data state: +ATO	Y	Y			
4.3.3.14	Asynchronous Mode, &Q	Y	Y			
4.3.3.15	Hang-up call: +CHUP	Y	Y			
4.3.3.16	Single Numbering Scheme : +CSNS	Y	Y			
4.3.3.17	Selection of Desired Message to Be Displayed Upon Connection of a Voice Call, +MDC	Y	Y			
4.3.3.18	Diverting an Incoming call when User Busy: CTFR1	Y	Y			
4.3.4	Call Status Messages					
4.3.4.1	Phone activity status: +CPAS	Y	Y			
4.3.4.2	List current calls: +CLCC	Y	Y			
4.3.4.3	Request Call Processing Status: +MCST?	Y	Y			
4.3.5	Call Advice of Charge	N	Y		CAOC ONLY	
4.3.5.1	Advice of charge: +CAOC	Y	Y			
4.3.5.2	Accumulated call meter : +CACM	N	Y			
4.3.5.3	Accumulated call meter maximum: +CAMM	N	Y			
4.3.5.4	Price per unit and currency table: +CPUC	N	Y			
4.3.5.5	Service reporting control: +CR	Y	Y			
4.3.6	Supplementary Services					
4.3.6.1	Supplementary service notifications: +CSSN	N	Y			
4.3.6.2	Unstructured supplementary service data: +CUSD	Y	Y	Y	CUSD: (0,1)	CUSD: (0)
4.3.6.3	Connected Line Identification Presentation, +COLP	N	Y			

4.4.1	Directory Access Commands					
4.4.1.1	Select phonebook memory: +CPBS	Y	Y	Y	CPBS: ("FD","LD","ME","MT","SM" ,"DD","RC","MC")	CPBS: ("ME","SM","MT","ON","DC" ,"MC","RC","EN","AD","Q" D","SD","FD")
4.4.1.2	Read Phonebook Entries: +CPBR	Y	Y			
4.4.1.4	Find Phonebook Entries: +CPBF	Y	Y			
4.4.1.6	Write Phonebook Entry: +CPBW	Y	Y			
4.4.1.8	Set Voice Mail Number: +CSVM	Y	Y			
4.4.1.9	Motorola Deactivate SIM Indications: +MDSI	Y	Y			
4.4.1.10	Motorola Change Subscriber Number: MCSN	Y	Y			
4.4.2.1	Read/Set system date and time: +CCLK	N	Y			
4.5.1.1	Select Message Service: +CSMS	Y	Y			
4.5.1.2	Preferred Message Storage: +CPMS	Y	Y		CPMS: "SM",003,020,"SM",003,02 0	CPMS: (SM,ME,BM,MT),(ME),(SM)
4.5.1.3	Message Format: +CMGF	Y	Y			
4.5.1.4	Service Centre Address: +CSCA	Y	Y			
4.5.1.5	Setting TEXT Mode Parameters: +CSMP	Y	Y			
4.5.1.6	Show Text Mode Parameters: +CSDH	Y	Y			
4.5.1.7	New Message Indications to TE: +CNMI	Y	Y			
4.5.1.8	New Message Acknowledgment, +CNMA	Y	Y			
4.5.1.9	Unsolicited Result Code (SMS Message Receipt): +CMTI	Y	Y			
4.5.1.10	Unsolicited Response (New MT Message Receipt): +CMT	Y	Y			
4.5.1.11	Unsolicited Response (New CB Message Receipt): +CBM	Y	Y			
4.5.1.12	List Messages: +CMGL, +MMGL	Y	Y			
4.5.1.13	Read Message: +CMGR, +MMGR	Y	Y			
4.5.1.14	Motorola Mark As Read: +MMAR	N	Y			
4.5.1.15	Send Message From Storage: +CMSS	Y	Y			
4.5.1.16	Write Message to Memory: +CMGW	Y	Y			
4.5.1.17	Delete Message: +CMGD	Y	Y			
4.5.1.18	Select service for MO SMS messages: +CGSMS	N	Y			
4.5.1.19	Send SM: +CMGS	Y	Y			
4.5.1.20	Select Cell Broadcast Message Types: +CSCB	Y	Y			
4.5.1.21	Motorola Control SMS Alert Tone: +MCSAT	Y	Y			
4.5.1.22	Email Gateway Address: +MEGA	N	Y			

4.5.1.23	DCS handling (CSMP)	Y	Y			
4.6	NETWORK					
4.6.1.1	Signal Strength: +CSQ	Y	Y			
4.6.1.2	Radio link protocol: +CRLP	Y	Y			
4.6.1.3	Network registration: +CREG	Y	Y			
4.6.1.4	GPRS network registration status: +CGREG	Y	Y			
4.6.1.5	Operator selection: +COPS/EONS	Y	Y			
4.6.1.6	Preferred operator list : +CPOL	Y	Y			
4.6.1.7	Motorola Frequency of Search: +MFS	Y	Y			
4.7.1	HARDWARE INFORMATION					
4.7.1.1	Battery Charge Level: +CBC	Y	Y			
4.7.1.2	Baudrate regulation: +CBAUD	Y	Y			
4.7.1.3	Fixed TE data rate: +IPR	Y	Y			
4.7.1.4	Request overal capabilities: +GCAP	Y	Y			
4.7.1.5	DTR line test command: +MTDTR	Y	Y			
4.7.1.6	CTS line test command: +MTCTS	Y	Y			
4.7.1.7	RTS/CTS flow control: AT&K	Y	Y			
4.7.1.8	Circuit 109 (R signal) behaviour: AT&C	Y	Y			
4.7.1.9	Circuit 108 (Data Term) behaviour: AT&D	Y	Y	Y	&D: (0-3)	&D: (0-4)
4.7.1.10	Wake line control command: +MCWAKE	Y	Y			
4.7.1.11	Set Phone Functionality : +CFUN	Y	Y?	Y		
4.7.1.12	DTE-DCE Character Framing: +ICF	N	Y			
4.7.1.13	Continuous PCM clock: AT+MPCMC	N	Y			
4.7.1.14	Antenna Diagnostic: ATS97	N	Y			
4.7.1.15	Motorola Hardware Reset: MRST	N	Y			
4.8	Audio					
4.8.2.1	Ring Type Selection: +CRTT	Y	Y	Y	CRTT: (000-010),(000-	CRTT: (6-49),(0-2)
4.8.2.2	Side tone cancelling feature for audio devices: ATS94	Y	Y			
4.8.2.3	Echo canceling feature for audio devices: ATS96	Y	Y			
4.8.2.4	Ringer sound level: +CRSL	Y	Y			
4.8.2.6	Tone duration: +VTD	N	Y			
4.8.2.7	DTMF and tone generation: +VTS	N	Y			
4.8.2.8	Mute/Unmute Currently Active Microphone Path, +CMUT	N	Y			
4.8.2.9	Loudspeaker volume level: +CLVL	Y	Y			
4.8.3.1	Set/Request Audio Path: +MAPATH	N	Y			
4.8.3.2	Analog/Digital Audio Switching, +MADIGITAL	N	Y			

4.8.3.3	Set/Request Volume setting: +MAVOL	N	Y			
4.8.3.4	Enable/Disable Algorithm features: +MAFEAT	N	Y			
4.8.3.5	Set/Request input devices mute: +MAMUT	N	Y			
4.8.3.6	Alert sound mode : +CALM	N	Y			
4.8.3.7	Set microphone gain: +MMICG	N	Y			
4.9.1	Access Control					
4.9.1.1	Repeat last command: A/	Y	Y			
4.9.1.2	Check AT communication: AT	Y	Y			
4.9.1.3	Enter PIN for Unlocking SIM Card: +CPIN	Y	Y			
4.9.1.4	Change password: +CPWD	Y	Y	Y	("CS",4),("SC",8),("AO",8),("OI",8),("OX",8),("AI",8),("IR",8),("AB",8),("AG",8),("AC",8),("FD",8),("P2",8)	CPWD: ("SC",8),("AO",8),("OI",8),("OX",8),("AI",8),("IR",8),("AB",8),("AG",8),("AC",8),("P2",8)
4.9.1.5	Facility lock: +CLCK	Y	Y			
4.10.1.1	DCE Response Format - ATV	Y	Y			
4.10.1.2	Result Code Suppression - ATQ	Y	Y			
4.10.1.3	Command Echo - ATE	Y	Y			
4.10.1.4	Result code selection and call progress monitoring control - ATX	Y	Y			
4.10.1.6	Show the status of the commands and S-Registers in effect ATZ	Y	Y			
4.10.1.10	Change radio band: +CBAND	Y	N			
4.10.1.11	Return the value of the last updated S register - AT?	Y	Y			
4.10.1.12	Set to factory defined configuration -AT&F	Y	Y			
4.10.1.13	Reset to default configuration ATZ	Y	Y			
4.10.2	Sleep mode and wake up lines					
4.10.2.3	Sleep mode - ATS24	Y	Y			
4.10.2.4	Set delay before sending data to DTE - ATS102	Y	Y	Y	ATS99	
4.10.2.5	Sleep Mode AT Commands: ATS100	Y	Y	Y		
4.10.2.6	Enable/Disable CTS during wakeup period +MSCTS	Y	Y			
4.10.3.1	Report Mobile Equipment Error: +CMEE	Y	Y			
4.10.3.2	Extended error report: +CEER	Y	Y			
4.11.2	Set Ignition State: +MHIG	N	Y			

4.11.3	Keypad Control: +CKPD	Y	Y			
4.11.4	Auxiliary Keypad Control: +MKPD	N	Y			
4.11.5	Set/Request Local Keypress Echo: +CMER	Y	Y	Y	CMER: (00),(00),(00,01),(00,01),(00)	CMER: (0),(0,1,2),(0,1),(0,1),(0)
4.11.6.1	Keypress Echo Output: +CKEV	N	Y			
4.11.6.2	Change Display Indication, +CDEV	Y	Y			
4.11.6.3	Indicator Event Reporting, +CIEV,	Y	Y	Y		
4.11.6.4	Phonebook Event: +MUPB	N	Y			
4.11.7	View Configuration: &V	Y	Y			
4.11.8	Store User Profile: &W	Y	Y			
4.11.9	Default User Profile: &Y	Y	Y			
4.11.10	Restricting SIM Access: CRSM	Y	Y	Y	CRSM: (176),(1-3,197,214,242,243)	CRSM: (176),(197,214,242,243,251,252)
4.12.1	GPRS Functionality					
4.12.2.1	GPRS mobile station class: +CGCLASS	Y	Y			
4.12.2.2	Define PDP context: +CGDCONT	Y	Y			
4.12.2.3	Quality of Service Profile (Min): +CGQMIN	Y	Y			
4.12.2.4	Quality of Service Profile (Requested): +CGQREC	Y	Y			
4.12.2.5	GPRS attach or detach: +CGATT	Y	Y			
4.12.2.6	Request GPRS service "D" - ATD*99	Y	Y			
4.12.2.7	GPRS coverage: +CGPRS	Y	Y			
4.12.2.8	PDP context activate or deactivate: +CGACT	Y	Y			
4.14	FAX CLASS 1	Y	Y			
4.14.1	AT+FAR,+FCL, +FDD, +FIT.	Y	Y			
4.14.1.1	Select mode: AT+FCLASS	Y	Y			
4.14.1.2	FTS	Y	Y			
4.14.1.3	FRS	Y	Y			
4.14.1.4	FTM	Y	Y			
4.14.1.5	FRM	Y	Y			
4.14.1.6	FTH	Y	Y			
4.14.1.7	FRH	Y	Y			
4.14.1.8	TE-TA local flow control: +IFC	Y	Y	Y	IFC: (2),(2)	IFC: (0-3),(0-2)
4.15.1.3	Motorola Toolkit Enable +MTKE	Y	N			
4.15.1.4	Motorola Toolkit Proactive +MTKP	Y	N			

4.15.1.5 - 6	Motorola Toolkit Menu +MTKM	Y	N			
4.15.1.7	Motorola Toolkit Call Control +MTKC	Y	N			
4.15.2	TCP/IP					
4.15.2.1	Create a wireless link +MIPCALL	N	Y			
4.15.2.2	Open a socket (UDP or TCP) +MIPOPEN	N	Y			
4.15.2.3	Close a socket +MIPCLOSE	N	Y			
4.15.2.4	Set Size for automatic push +MIPSETS	N	Y			
4.15.2.5	Send data +MIPSEND	N	Y			
4.15.2.6	Push data into protocol stack +MIPPUSH	N	Y			
4.15.2.7	Flush data from buffers +MIPFLUSH	N	Y			
4.15.2.8	Receive Data from UDP Protocol Stack, +MIPRUDP	N	Y			
4.15.2.9	Receive Data from TCP Protocol Stack, +MIPRTCP	N	Y			
4.15.2.10	Status report +MIPSTAT	N	Y			
4.15.2.11	Flow control - Xoff +MIPXOFF	N	Y			
4.15.2.12	Flow control - Xon +MIPXON	N	Y			
4.15.2.13	Configure Internal TCP/IP stack: +MIPCONF	N	Y			
4.16	RS232 MULTIPLEXER FEATURE	Y	Y	Y	2 DLC's	4 dedicated DLC's
4.16.2	Multiplexing mode: +CMUX	Y	Y	Y		
	GPIO 8 PINs management: +MIOD; +MIOC	N	Y			
	Voice Tag Functionality (ART): +MVAD; +MVSET; +MVTR	N	Y			
	Filtering Incoming Calls: +MFIC	N	Y			
	Motorola Cell Info: +MCI	N	Y			
	Motorola Phonebook Dynamic Percentage Memory: +MPDPM	N	Y			

AT commands, supported only by G18

Change message attribute +MMGA	Y	N			
Additional network information +MOPS	Y	N			
ENABLE +CIP AT Command +CIPE	Y	N			
IP Primitive Over AT Command +CIP	Y	N			
Mobile Equipment Control Mode +CMEC	Y	N			
Calling mode +CMOD	Y	N			
Network Registration +MREG	Y	N			
Entering SMS Block Mode +CESP	Y	N			
Change band +CBAND	Y	N			