EC200U&EG915U Series
MMS Application Note

LTE Standard Module Series

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About the Document

Revision History

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-	2021-08-14	Lambert ZHAO	Creation of the document
1.0	2021-11-15	Lambert ZHAO	First official release

Contents

Table Index

1 Introduction

Quectel EC200U series and EG915U series modules provide MMS application interfaces for sending messages including multimedia objects (image, audio, rich text, etc.). This document is a reference guide to all the AT commands defined for MMS.

1.1. The Process of Sending MMS Messages

Step 1: Configure and activate a PDP context.
1) Configure **<APN>**, **<username>**, **<password>** and other parameters of a PDP context by **AT+QICSGP**. See *document [1]* for more details. If QoS settings need to be updated, configure them by **AT+CGQMIN** and **AT+CGQREQ**. See *document [2]* for more details.
2) Activate the PDP context by **AT+QIACT**.
3) Configure the PDP context ID for MMS by **AT+QMMSCFG="contextid",<contextID>**.

Step 2: Configure URL and proxy of MMSC.
1) Configure the URL of MMSC by **AT+QMMSCFG="mmsc",<URL>**.
2) Configure the proxy of MMSC by **AT+QMMSCFG="proxy",<gateway>,<port>**.
3) Configure parameters to be used in sending a message by **AT+QMMSCFG="sendparam",<valid>,<pri>,<sendrep>,<readrep>,<visible>,<class>**.

Step 3: Edit an MMS message.
1) Add TO addresses by **AT+QMMSEDIT=1,1,<optstring>**.
2) Add CC addresses by **AT+QMMSEDIT=2,1,<optstring>**.
3) Add BCC addresses by **AT+QMMSEDIT=3,1,<optstring>**.
4) Edit the title by **AT+QMMSEDIT=4,1,<optstring>**. The character set of the title should be specified by **AT+QMMSCFG="character",<charset>** first.
5) Add attachments by **AT+QMMSEDIT=5,1,<optstring>**. The attachments can be UFS, SFS, EFS, or SD files. And the files can be uploaded to UFS, SFS, EFS, or SD card by **AT+QFUPL**. See *document [3]* for details about this command. If the attachment is a text file, the character set should be specified by **AT+QMMSCFG="character",<charset>** first.

Step 4: Send an MMS message by **AT+QMMSEND=<timeout>**. It may take some time to successfully send an MMS message.

Step 5: Clear the content of an MMS message by **AT+QMMSEDIT=0** and delete attachments by **AT+QFDEL**. See *document [3]* for more details.

When sending an MMS message to the same recipient again, step 4 to 5 can be repeated and when sending an MMS message to another recipient, step 2 to 5 can be repeated.

NOTE

The storage medium (file type) supported may vary in different modules. See *document [3]* for details.

2 Description of MMS AT Commands

2.1. AT Command Introduction

2.1.1. Definitions

- **<CR>**   Carriage return character.
- **<LF>**   Line feed character.
- **<...>**   Parameter name. Angle brackets do not appear on the command line.
- **[...]**   Optional parameter of a command or an optional part of TA information response. Square brackets do not appear on the command line. When an optional parameter is not given in a command, the new value equals to its previous value or the default settings, unless otherwise specified.
- <u>**Underline**</u>   Default setting of a parameter.

2.1.2. AT Command Syntax

All command lines must start with **AT** or **at** and end with **<CR>**. Information responses and result codes always start and end with a carriage return character and a line feed character: **<CR><LF><response><CR><LF>**. In tables presenting commands and responses throughout this document, only the commands and responses are presented, and **<CR>** and **<LF>** are deliberately omitted.

Table 1: Types of AT Commands

Command Type	Syntax	Description
Test Command	**AT+<cmd>=?**	Test the existence of corresponding Write Command and return information about the type, value, or range of its parameter.
Read Command	**AT+<cmd>?**	Check the current parameter value of a corresponding Write Command.
Write Command	**AT+<cmd>=<p1>[,<p2>[,<p3>[...]]]**	Set user-definable parameter value.
Execution Command	**AT+<cmd>**	Return a specific information parameter or perform a specific action.

2.2.   Declaration of AT Command Examples

The AT command examples in this document are provided to help you familiarize with AT commands and learn how to use them. The examples, however, should not be taken as Quectel's recommendation or suggestions about how you should design a program flow or what status you should set the module into. Sometimes multiple examples may be provided for one AT command. However, this does not mean that there exists a correlation among these examples and that they should be executed in a given sequence.

2.3.   Description of MMS AT Commands

2.3.1.   AT+QMMSCFG   Configure Parameters of MMS

This command configures PDP context ID, MMSC, proxy, character type and other MMS parameters.

AT+QMMSCFG Configure Parameters of MMS	
Test Command **AT+QMMSCFG=?**	Response **+QMMSCFG: "contextid",(**range of supported **<contextID>**s**)** **+QMMSCFG: "mmsc",<URL>** **+QMMSCFG: "proxy",<gateway>,(**range of supported **<port>**s**)** **+QMMSCFG: "character",(**list of supported **<charset>**s**)** **+QMMSCFG: "sendparam"[,(**range of supported **<valid>**s**),(**range of supported **<pri>**s**),(**list of supported **<sendrep>**s**),(**list of supported **<readrep>**s**),(**range of supported **<visible>**s**),(**range of supported **<class>**s**)]** **+QMMSCFG: "supportfield",(**list of supported **<mode>**s**)** **OK**
Read Command **AT+QMMSCFG?**	Response **OK**
Write Command **AT+QMMSCFG="contextid"[,<contextID>]**	Response If the optional parameter is omitted, query the current settings: **+QMMSCFG: "contextid",<contextID>** **OK** If the optional parameter is specified, configure the PDP context ID of MMS: **OK**

	Or
	+CME ERROR: <err>
Write Command **AT+QMMSCFG="mmsc"[,<URL>]**	Response If the optional parameter is omitted, query the current settings: **+QMMSCFG: "mmsc",<URL>** **OK** If the optional parameter is specified, configure MMSC URL: **OK** Or **+CME ERROR: <err>**
Write Command **AT+QMMSCFG="proxy"[,<gateway>,<port>]**	Response If the optional parameters are omitted, query the current settings: **+QMMSCFG: "proxy",<gateway>,<port>** **OK** If the optional parameters are specified, configure proxy gateway and port: **OK** Or **+CME ERROR: <err>**
Write Command **AT+QMMSCFG="character"[,<charset>]**	Response If the optional parameter is omitted, query the current settings: **+QMMSCFG: "character",<charset>** **OK** If the optional parameter is specified, configure the character format: **OK** Or **+CME ERROR: <err>**
Write Command **AT+QMMSCFG="sendparam"[,<valid>,<**	Response If the optional parameters are omitted, query the current

pri>,<sendrep>,<readrep>,<visible>,<class>]	settings: **+QMMSCFG: "sendparam",<valid>,<pri>,<sendrep>,<readrep>,<visible>,<class>** **OK** If the optional parameters are specified, configure sendparam properties: **OK** Or **+CME ERROR: <err>**
Write Command **AT+QMMSCFG="supportfield"[,<mode>]**	Response If the optional parameter is omitted, query the current settings: **+QMMSCFG: "supportfield",<mode>** **OK** If the optional parameter is specified, configure supportfield properties: **OK** Or **+CME ERROR: <err>**
Maximum Response Time	300 ms
Characteristics	The command takes effect immediately. The configurations will not be saved.

Parameter

<contextID>	Integer type. The PDP context ID. Range: 1–7; default value: 1.
<URL>	String type. The address of MMSC. The maximum length of URL is 248 bytes.
<gateway>	String type. The IP address of MMS proxy. The maximum length of gateway is 248 bytes.
<port>	Integer type. The port of MMS proxy. Range: 1–65535; Default value: 80.
<charset>	String type. The type of character set.
	"ASCII"　　US-ASCII character set
	"UTF8"　　UTF8 character set
	"UCS2"　　ISO-10646-UCS-2 character set. Big-endian order needs to be specified.
	"GBK"　　GBK character set
<valid>	Integer type. The valid period of the MMS message.

	0	1 hour
	1	12 hours
	2	24 hours
	3	2 days
	4	1 week
	5	No limitation
	<u>6</u>	Depend on network configuration
<pri>	Integer type. The priority of the MMS message.	
	0	Low
	1	Normal
	2	High
	<u>3</u>	Depend on network configuration
<sendrep>	Integer type. Whether to deliver report.	
	<u>0</u>	No
	1	Yes
<readrep>	Integer type. Whether to read report.	
	<u>0</u>	No
	1	Yes
<visible>	Integer type. Whether to hide address.	
	0	Hide all addresses
	1	Show all addresses, including BCC address
	<u>2</u>	Depend on network configuration
<class>	Integer type. The class of the MMS message.	
	0	Personal
	1	Advertisement
	2	Informational
	3	Automatic
	<u>4</u>	Depend on network configuration
<mode>	Integer type. Whether to add the header option of MMS x-up-calling-id.	
	<u>0</u>	No
	1	Yes
<err>	The error code of operation. See **Chapter 5** for details.	

2.3.2. AT+QMMSEDIT   Edit MMS Messages

This command adds the recipient addresses, edit title and add attachments for MMS messages. The character set of title or text file should be specified by **AT+QMMSCFG="character",<charset>**. For example, if the content of a text file is presented as UTF8 character set, **AT+QMMSCFG="character","UTF8"** must be executed first.

AT+QMMSEDIT Edit MMS Messages	
Test Command **AT+QMMSEDIT=?**	Response +QMMSEDIT: **(**range of supported **<function>**s**),(**list of supported **<function_configure>**s**),<optstring>**

	OK
Read Command **AT+QMMSEDIT?**	Response **OK**
Write Command **AT+QMMSEDIT=<function>[,<function_con figure>[,<optstring>]]**	Response 1) If the optional parameters are omitted: When **<function>** is not 0 or 4, query the specified settings of **<function>**: List of **[+QMMSEDIT: <function>,<optstring>]** **OK** Or **+CME ERROR: <err>** When **<function>**=4, query the specified settings of **<function>**: List of **[+QMMSEDIT: <function>,<charset>,<optstr ing>]** **OK** Or **+CME ERROR: <err>** When **<function>**=0, delete all content of MMS message: **OK** Or **+CME ERROR: <err>** 2) If any of the optional parameters is specified: When **<function_configure>**=0, **<optstring>** needs to be omitted, which means deleting the specified settings of **<function>**: **OK** Or **+CME ERROR: <err>** When **<function_configure>**=1, **<optstring>** should be specified, which means setting the specified settings of **<function>**: **OK**

	Or
	+CME ERROR: <err>
Maximum Response Time	300 ms
Characteristics	The command takes effect immediately.
	The configurations will not be saved.

Parameter

<function>	Integer type. Function operation.
	0 Delete all content
	1 Add TO address
	2 Add CC address
	3 Add BCC address
	4 Add MMS message title
	5 Add file as attachment
<function_configure>	Integer type. Enable/disable **<function>**.
	0 Delete the specified settings of **<function>**.
	1 Set the specified settings of **<function>**.
<charset>	String type. The type of character set.
	"ASCII" US-ASCII character set
	"UTF8" UTF8 character set
	"UCS2" ISO-10646-UCS-2 character set. Big-endian order needs to be specified
	"GBK" GBK character set
<optstring>	String type.
	If **<function>**=1, 2 or 3, it is the recipient address. The maximum number of TO, CC and BCC addresses is 6 and the maximum length of the addresses is 128 bytes.
	If **<function>**=4, it is the MMS message title. The maximum length of title is 256 bytes.
	If **<function>**=5, it is the file name of attachment. If the file name starts with "UFS", "SFS", "EFS", or "SD", it indicates the file is from "UFS", "SFS", "EFS", or "SD" card respectively. The maximum length of file name is 128 bytes. The maximum number of attachments is 12, and the maximum size of attachments is restricted by the operator.
<err>	The error code of operation. See **Chapter 5** for details.

NOTE

The storage medium (file type) supported may vary in different modules. See **document [3]** for details.

2.3.3. AT+QMMSEND   Send MMS Messages

This command sends MMS messages. You should not re-execute **AT+QMMSEND** until **+QMMSEND: <err>,<httprsp>[,<mmsrsp>]** is returned. When the **<timeout>** arrives, if the process of sending MMS messages has not finished yet, MMS sending will be interrupted.

AT+QMMSEND Send MMS Messages	
Test Command **AT+QMMSEND=?**	Response **+QMMSEND: (**range of supported **<timeout>**s**)** **OK**
Read Command **AT+QMMSEND?**	Response **OK**
Write Command **AT+QMMSEND=<timeout>**	Response **OK** **+QMMSEND: <err>,<httprsp>[,<mmsrsp>]** Or **+CME ERROR: <err>**
Maximum Response Time	300 ms
Characteristics	The command takes effect immediately. The configurations will not be saved.

Parameter

<timeout>	Integer type. The maximum time to send MMS messages. Range: 1–65535; Unit: second.
<httprsp>	Integer type. The response code of HTTP(S), for reference only. For example, 200 indicates that HTTP(S) posts data successfully. See *Chapter 6* for details.
<mmsrsp>	String type. The response string from MMSC when MMS messages sending fails.
<err>	If MMS messages are sent successfully, **<err>** is 0. Otherwise, **<err>** indicates the error code of operation. See *Chapter 5* for details.

3 Examples

3.1. Add Recipients

//Add phone number or email address as a TO recipient. The maximum number of recipients is 6.

AT+QMMSEDIT=1,1,"13856122546" //Add a phone number as a recipient.
OK
AT+QMMSEDIT=1,1,"recipient .test@quectel.com" //Add an email address as a recipient.
OK
AT+QMMSEDIT=1 //Query the recipients' address.
+QMMSEDIT: 1,"13856122546"
+QMMSEDIT: 1,"recipient.test@quectel.com"

OK
//Delete the recipients by executing **AT+QMMSEDIT=1,0**.
AT+QMMSEDIT=1,0 //Delete a recipient.
OK
AT+QMMSEDIT=1 //Query the recipients' address.
OK

3.2. Add CC Recipients or BCC Recipients

//The operation of adding CC recipients differs from that of adding BCC recipients. For CC recipients, the **<function>** value is 2. For BCC recipients, it is 3.
AT+QMMSEDIT=2,1,"13856122546" //Add a phone number as a CC recipient.
OK
AT+QMMSEDIT=2 //Query the CC recipients' address.
+QMMSEDIT: 2,"13856122546"

OK
//Delete the CC recipient by executing **AT+QMMSEDIT=2,0**.
AT+QMMSEDIT=2,0 //Delete the CC recipient.
OK
AT+QMMSEDIT=2 //Query the CC recipients' address.

OK

3.3. Edit the Title of MMS Messages

//The character set of title is set by **AT+QMMSCFG="character",<charset>**. If the **<charset>** is "ASCII", add the title as follows:

AT+QMMSCFG="character","ASCII" //Set the charset as "ASCII".
OK
AT+QMMSEDIT=4,1,"test EC200U mms" //Edit the title of the MMS message.
OK
AT+QMMSEDIT=4 //Query the title of the MMS message.
+QMMSEDIT: 4,"ASCII","test EC200U mms"

OK
//If the **<charset>** is not ASCII, the input data of **<optstring>** should be hex string .
AT+QMMSCFG="character", "UTF8" //Set the charset as "UTF8".
OK
AT+QMMSEDIT=4,1," 7465737420454332303055206D6D73" //Edit the title of MMS message. "7465737420454332303055206D6D73" is the hex string corresponding to "test EC200U mms" in UTF8.
OK
AT+QMMSEDIT=4 //Query the title of the MMS message.
+QMMSEDIT: 4,"UTF8","7465737420454332303055206D6D73"

OK
//Delete the title by executing **AT+QMMSEDIT=4,0**.
AT+QMMSEDIT=4,0 //Delete the title of the MMS message.
OK
AT+QMMSEDIT=4 //Query the title of the MMS message.

OK

3.4. Add Attachments

//You can add attachments for an MMS message. The attachments can be UFS, SFS, EFS, and SD files. The storage medium (file type) supported may vary in different modules. See *document [3]* for details. The maximum number of attachments is 12 and the maximum length of file name is 128 bytes. The total size of attachments may be restricted by the operator. In the following example, the attachment is an UFS text file:

AT+QFUPL="UFS:test_mms.txt",100,200,1　　　//Upload a file to UFS. The file will be saved as *test_mms.txt* and the maximum size of the file is 100 bytes. 200 indicates timeout value, and 1 indicates enabling ACK mode. See *document [3]* for more details.

CONNECT
+QFUPL: 100,612c

OK
AT+QFLST="UFS:*"　　　//Query the file list of UFS.
+QFLST: "UFS:test_mms.txt",100

OK
AT+QMMSCFG="character","ASCII"　　　//Set the charset as "ASCII" for UFS:*test_mms.txt*.
OK
AT+QMMSEDIT=5,1,"UFS:test_mms.txt"　　　//Add attachments for the MMS message.
OK
AT+QMMSEDIT=5　　　//Query the attachments.
+QMMSEDIT: 5,"UFS:test_mms.txt"

OK
//In the following example, the attachment is an UFS JPG file:
AT+QFUPL="UFS:test_pic.jpg",200,300,1　　　//Upload a file to UFS. The file will be saved as *test_pic.jpg* and the maximum size of file is 200 bytes. 300 indicates timeout value, and 1 indicates enabling ACK mode. See *document [3]* for more details.

CONNECT
+QFUPL: 200,0000

OK
AT+QFLST="UFS:*"　　　//Query the file list of UFS.
+QFLST: "UFS:test_mms.txt",100
+QFLST: "UFS:test_pic.jpg",200

OK
AT+QMMSEDIT=5,1,"UFS:test_pic.jpg"　　　//UFS:*test_pic.jpg* is not a text file. There is no need to specify the character set.

OK
AT+QMMSEDIT=5　　　//Query the attachments.
+QMMSEDIT: 5,"UFS:test_mms.txt"
+QMMSEDIT: 5,"UFS:test_pic.jpg"

OK
//Delete the attachments by **AT+QMMSEDIT=5,0**.

```
AT+QMMSEDIT=5,0                          //Delete all the attachments of the MMS message.
OK
AT+QMMSEDIT=5                            //Query the attachments.
OK
//After sending the MMS message successfully, UFS files should be deleted by AT+QFDEL.
AT+QFDEL="UFS:test_mms.txt"              //Delete the UFS file.
OK
AT+QFDEL="UFS:test_pic.jpg"              //Delete the UFS file.
OK
AT+QFLST="UFS:*"                         //Query the file list of UFS.
OK
```

3.5.   Clear All Contents of MMS Messages

```
//Delete the content, recipients, CC recipients, BCC recipients, title and attachments of an MMS message
by AT+QMMSEDIT=0.
AT+QMMSEDIT=0                            //Clear all contents of the MMS message.

OK

AT+QMMSEDIT=1                            //Query recipients.
OK
AT+QMMSEDIT=2                            //Query CC recipients.
OK
AT+QMMSEDIT=3                            //Query BCC recipients.
OK
AT+QMMSEDIT=4                            //Query title of the MMS message.
OK
AT+QMMSEDIT=5                            //Query attachments.
OK
```

3.6.   Send MMS Messages

```
//Step 1: Configure and activate a PDP context.
AT+QICSGP=1,1,"UNIWAP","" ,"",1          //Configure PDP context 1. APN is "UNIWAP" for
                                           China Unicom.

OK
AT+QIACT=1                               //Activate PDP context 1.
OK                                       //Successful activation.
AT+QIACT?                                //Query the state of PDP context.
+QIACT: 1,1,1,"10.7.157.1"
```

OK

AT+QMMSCFG="contextid",1　　　　　　　　　　//Set the PDP context ID as 1. The PDP context ID
　　　　　　　　　　　　　　　　　　　　　　　　　must be activated first.

OK

AT+QMMSCFG="contextid"　　　　　　　　　　//Query the PDP context ID.

+QMMSCFG: "contextid",1

OK

//Step 2: Configure the URL and proxy of MMSC.

AT+QMMSCFG="mmsc","mmsc.myuni.com"　　//Configure the URL of MMSC. "mmsc.myuni.com"
　　　　　　　　　　　　　　　　　　　　　　　　　is for China Unicom.

OK

AT+QMMSCFG="mmsc"　　　　　　　　　　　//Query the URL of MMSC.

+QMMSCFG: "mmsc","http://mmsc.myuni.com"

OK

AT+QMMSCFG="proxy","10.0.0.172",80　　　//Configure the proxy address and port of MMSC.
　　　　　　　　　　　　　　　　　　　　　　　　　"10.0.0.172:80" is for China Unicom.

OK

AT+QMMSCFG="proxy"　　　　　　　　　　　//Query the proxy address and port of MMSC.

+QMMSCFG: "proxy","10.0.0.172",80

OK

//Step 3: Configure the parameters to be used in sending message.

AT+QMMSCFG="sendparam",6,2,0,0,2,4　　　//Configure the parameters.

OK

AT+QMMSCFG="sendparam"　　　　　　　　//Query the parameters.

+QMMSCFG: "sendparam",6,2,0,0,2,4

OK

//Step 4: Edit the MMS message.

AT+QMMSEDIT=1,1,"13856122546"　　　　　//Add a phone number as a TO recipient.

OK

AT+QMMSEDIT=2,1,"copy.test@quectel.com"　//Add an email address as a CC recipient.

OK

AT+QMMSEDIT=3,1,"secret.test@quectel.com"　//Add an email address as a BCC recipient.

OK

AT+QMMSEDIT=1　　　　　　　　　　　　　//Query the recipient address.

+QMMSEDIT: 1,"13856122546"

OK

AT+QMMSEDIT=2　　　　　　　　　　　　　//Query the CC recipient address.

+QMMSEDIT: 2,"copy.test@quectel.com"

```
OK
AT+QMMSEDIT=3                              //Query the BCC recipient address.
+QMMSEDIT: 3,"secret.test@quectel.com"

OK
AT+QMMSCFG="character","ASCII"            //Configure the character type as ASCII for title.
OK
AT+QMMSEDIT=4,1,"test EC200U mms"         //Edit the title of the MMS message.
OK
AT+QMMSEDIT=4                             //Query the title of the MMS message.
+QMMSEDIT: 4,"ASCII","test EC200U mms"

OK
//Add attachments.
AT+QFUPL="UFS:test.txt",100,300,1         //Upload a file to UFS. The file will be saved as
                                          test.txt and the maximum size of file is 100 bytes.
                                          300 indicates timeout value, and 1 indicates
                                          enabling ACK mode. See document [3] for more
                                          details.
CONNECT
+QFUPL: 100,612c

OK
AT+QFLST="UFS:*"                          //Query the file list of UFS.
+QFLST: "UFS:test.txt",100

OK
AT+QMMSCFG="character","ASCII"            //Configure the character type as ASCII for UFS:test.txt.
OK
AT+QMMSEDIT=5,1,"UFS:test.txt"            //Add attachments for the MMS message. test.txt is an
                                          UFS file.
OK
AT+QMMSEDIT=5                             //Query the attachments.
+QMMSEDIT: 5,"UFS:test.txt"

OK
AT+QFUPL="UFS:test_pic.jpg",200,300,1     //Upload a file to UFS. The file will be saved as
                                          test_pic.jpg and the maximum size of file is 200
                                          bytes. 300 indicates timeout value, and 1
                                          indicates enabling ACK mode. See document [3]
                                          for more details.
CONNECT
+QFUPL: 200,0000
```

```
OK
AT+QFLST="UFS:*"                              //Query the file list of UFS.
+QFLST: "UFS:test.txt",100
+QFLST: "UFS:test_pic.jpg",200

OK
AT+QMMSEDIT=5,1,"UFS:test_pic.jpg"            //UFS:test_pic.jpg is not a text file and there is no
                                                need to specify the character set.
OK
AT+QMMSEDIT=5                                 //Query the attachments.
+QMMSEDIT: 5,"UFS:test.txt"
+QMMSEDIT: 5,"UFS:test_pic.jpg"

OK
//Step 5: Send the MMS message.
AT+QMMSEND=100                                //Send the MMS message.
OK

+QMMSEND: 0,200                               //Indicate the result of sending the MMS message.
//Step 6: Clear content of the MMS message.
AT+QMMSEDIT=0                                 //Clear the content of the MMS message.
OK
AT+QFDEL="UFS:test.txt"                       //Delete the UFS file.
OK
AT+QFDEL="UFS:test_pic.jpg"                   //Delete the UFS file.
OK
```

4 Error Handling

4.1. MMS AT Commands Execution Fails

When executing MMS AT commands, if response **ERROR** is received from the module, please check whether the (U)SIM card is inserted, and whether **+CPIN: READY** is returned when executing **AT+CPIN?**.

4.2. PDP Activation Fails

If PDP context fails to be activated by **AT+QIACT**, please check the following configurations:

1. Query whether PS domain is attached or not by **AT+CGATT?**. If not, please execute **AT+CGATT=1** to attach PS domain.
2. Query the PS domain status by **AT+CGREG?** and make sure the PS domain has been registered.
3. Query the PDP context parameters by **AT+QICSGP** and make sure the APN of specified PDP context has been set.
4. Make sure the specified PDP context ID is neither used by PPP nor activated by **AT+CGACT**.
5. Make sure the number of PDP context activated is within the limit. When the module supports one (U)SIM card, it can support the activation of 5 PDP contexts with VoLTE feature enabled and of 7 PDP contexts with VoLTE feature disabled. The number of PDP contexts which can be activated depends on the number of (U)SIM card.

If all above configurations are correct, and the PDP context still fails to be activated by **AT+QIACT**, please reboot the module to resolve this issue. After rebooting the module, please execute the configurations mentioned above for at least three times at an interval of 10 minutes to avoid frequent rebooting.

4.3. Error Response of AT+QMMSEND

+QMMSEND: <err>,<httprsp>[,<mmsrsp>] will be returned after executing **AT+QMMSEND**. If **<err>** is not 0, it indicates that MMS sending fails, and please resend it. If resending fails, please deactivate the PDP context by **AT+QIDEACT** and re-activate it by **AT+QIACT**, then send the MMS message again.

5 Error Codes

The error codes **<err>** indicates errors related to mobile equipment or network. The details about **<err>** are described in the following table.

Table 2: Error Codes

<err>	Meaning
751	Unknown error
752	URL length error
753	URL error
754	Invalid proxy type
755	Proxy address error
756	Invalid parameter
757	Recipient address full
758	CC recipient address full
759	BCC recipient address full
760	Attachments full
761	File error
762	No recipient
763	File not found
764	MMS busy
765	Server response failed
766	Invalid report of HTTP(S) post
767	Error response of HTTP(S) post

768	PDP activation failed
769	PDP deactivated
770	Failed to create socket
771	Failed to connect socket
772	Failed to read socket
773	Failed to write socket
774	Socket closed
775	Timeout
776	Encode data error
777	HTTP(S) decode data error
778	OUT_OF_MEM

6 HTTP(S) Response Codes

The HTTP(S) protocol response codes **<httprsp>** indicates response from MMSC. Please see *RFC2616* (Hypertext Transfer Protocol--HTTP/1.1) for more details. **<httprsp>** is described in the following table.

Table 3: HTTP(S) Response Codes

<httprsp>	Meaning
200	OK
400	Bad request
403	Forbidden
404	Not found
409	Conflict
411	Length required
500	Internal server error
502	Bad gate way

7 Appendix References

Table 4: Related Documents

文档名称
[1] Quectel_EC200U&EG915U_Series_TCP(IP)_Application_Note
[2] Quectel_EC200U&EG915U_Series_AT_Commands_Manual
[3] Quectel_EC200U&EG915U_Series_FILE_Application_Note

Table 5: Terms and Abbreviations

Abbreviation	Description
BCC	Blind Carbon Copy
CC	Carbon Copy
HTTP	Hypertext Transfer Protocol
MMS	Multimedia Messaging Service
MMSC	Multimedia Messaging Service Center
PDP	Packet Data Protocol
QoS	Quality of Service
SD	Secure Digital
UFS	User File Storage
URL	Uniform Resource Locator