



SIM7500_SIM7600_SIM7800 Series_FTPS_AT Command Manual_V1.00

LTE Module

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This document is a reference guide to all the AT commands defined for FTP(S). Through these FTP AT commands, you can download file from FTP(S) server or upload file to FTP(S) server.

1 Introduction

1.1 The process of Using FTP(S) AT Commands

Step 1: Ensure GPRS network is available before performing FTP(S) related operations.

Step 2: Configure the parameter of PDP context by AT+CGDCONT.

Step 3: Activate the PDP context to start FTP(S) service by AT+CFTPSSTART.

Step 4: Login FTP(S) server by AT+CFTPSLOGIN.

Step 5: Download a file and save to module by AT+CFTPSGETFILE.

Step 6: Use AT+CFTPSABORT abort any FTP(S) operation.

Step 7: Use AT+CFTPSLOGOUT to logout FTP(S) server while finish FTP(S) operation.

Step 8: Deactivate the PDP context to stop FTP(S) service by AT+CFTPSSTOP

Note: make sure you login to a FTP(S) sever successfully before any other FTP(S) operations.

2 Description of AT Command

2.1 AT+CFTPSSTART Start FTP(S) service

AT+CFTPSSTART is used to start FTP(S) service by activating PDP context. You must execute AT+CFTPSSTART before any other FTP(S) related operations.

AT+CFTPSSTART Start FTP(S) service	
Execute Command AT+CFTPSSTART	Response a) If start FTP(S) service successfully: OK +CFTPSSTART: 0 b)If failed: OK

+CFTPSSTART: <errcode>

Defined Values

<errcode>	The result of start FTP(S) service, 0 is success, others are failure. Please refer to chapter 4.
-----------	--

2.2 AT+CFTPSSTOP Stop FTP(S) Service

AT+CFTPSSTOP Stop FTP(S) Service

AT+CFTPSSTOP STOP FTP(S) service	
Execute Command AT+CFTPSSTOP	Response a)If stop FTP(S) service successfully: OK +CFTPSSTOP: 0 b)If failed: OK +CFTPSSTOP: <errcode>

Defined Values

<errcode>	The result of stop FTP(S) service, 0 is success, others are failure. Please refer to chapter 4.
-----------	---

2.3 AT+CFTPSLOGIN Login to a FTP(S)server

AT+CFTPSLOGIN is used to login to a FTP(S) server, you can login to a FTP server by set parameter <server_type> to 0, login to an implicit FTPS server by set <server_type> to 3 and login to an explicit FTPS server by set <server_type> to 1 or 2. About <server_type>, more details please refer to defined values <server_type>.

AT+CFTPSLOGIN Login a FTP(S) server	
Test Command AT+CFTPSLOGIN=?	Response +CFTPSLOGIN:"ADDRESS",(1-65535)[, "USERNAME", "PASSWORD", (0-3)]
Write Command AT+CFTPSLOGIN="<host>",<port>,"<username>","<password>"[<server_type>]	Response a)If parameter format is right and login successful: OK +CFTPSLOGIN: 0

b) If parameter format is not right or other error not related with network occurs:

ERROR

c)if any other network related error occurs:

OK

+CFTPSLOGIN: <errcode>

Defined Values

<host>	Host address, string type, maximum length is 256
<port>	The host listening port for FTP(S), the range is from 1 to 65535
<username>	FTP(S) user name, string type, maximum length is 256
<password>	The user password, string type, maximum length is 256
<server_type>	FTP(S)server type,numeric,from0-3,default is 3 0 – FTP server. 1 – Explicit FTPS server with AUTH SSL. 2 – Explicit FTPS server with AUTH TLS. 3 – Implicit FTPS server.
<errcode>	The result code of the FTP/FTPS login. 0 is success. Others are failure, please refer to chapter 4.

2.4 AT+CFTPSLOGOUT Logout FTP(S) server

AT+CFTPSLOGOUT is used to logout a FTP(S) sever, make sure you login a FTP(S) sever before you execute AT+CFTPSLOGOUT command.

AT+CFTPSLOGOUT Logout a FTP(S) server	
Test Command AT+CFTPSLOGOUT=?	Response OK
Execute Command AT+CFTPSLOGOUT	Response a)If logout successfully: OK +CFTPSLOGOUT: 0 b)if failed: OK +CFTPSLOGOUT: <errcode>

Defined Values

<errcode>	The result code of the FTP/FTPS logout. 0 is success. Others are failure, please refer to chapter 4.
-----------	--

2.5 AT+CFTPSMKD Create a new directory on FTP(S) server

AT+CFTPSMKD is used to create a new directory on a FTP(S) server. Please make sure login to the FTP(S) server successfully before delete a directory.

AT+CFTPSMKD Create a new directory on FTP(S) server	
Test Command AT+CFTPSMKD=?	Response +CFTPSMKD: "DIR" OK
Execute Command AT+CFTPSMKD="<dir>"	Response a)if create directory successfully: OK +CFTPSMKDIR: 0 b) if failed: OK +CFTPSMKDIR: <errcode> c)if parameter format or any other errors: ERROR
Defined Values	
<dir>	The directory to be created, string type, maximum length is 256.
<errcode>	The result of create directory, 0 is success, others are failure, please refer to chapter 4

2.6 AT+CFTPSRMD Delete a directory on FTP(S) server

AT+CFTPSRMD is used to delete a directory on FTP(S) server, please make sure login to the FTP(S)server successfully before delete a directory.

AT+CFTPSRMD Delete a directory on FTP(S) server	
Execute Command AT+CFTPSRMD=?	Response +CFTPSRMD: "DIR" OK
Execute Command AT+CFTPSRMD="<dir>"	Response a)if delete the directory successfully: OK +CFTPSRMD:0 b)if delete the directory failed:

	<p>OK</p> <p>+CFTPSRMD:<errcode></p> <p>c) if parameter format or any errors:</p> <p>ERROR</p>
--	--

Defined Values

<dir>	The directory to be removed. If the directory contains non-ASCII characters, the <dir> parameter should contain a prefix of {non-ascii}.String type, maximum length is 256
<errcode>	The result of remove directory, 0 is success, others are failure, please refer to chapter 4

2.7 AT+CFTPSDELE Delete a file on FTP(S) server

You can use AT+CFTPSDELE delete a file on FTP(S) server, please make sure login to the FTP(S) server successfully before delete a directory.

AT+CFTPSDELE Delete a file on FTP(S) server	
<p>Test Command</p> <p>AT+CFTPSDELE=?</p>	<p>Response</p> <p>+CFTPSDELE: "FILENAME"</p> <p>OK</p>
<p>Execute Command</p> <p>AT+CFTPSDELE="<filename>"</p>	<p>Response</p> <p>a)if delete file successfully:</p> <p>OK</p> <p>+CFTPSDELE: 0</p> <p>b)if failed:</p> <p>OK</p> <p>+CFTPSDELE: <errcode></p> <p>c)if parameter format or any other errors:</p> <p>ERROR</p>

Defined Values

<filename>	The name of the file to be deleted. If the file name contains non-ASCII characters, the <filename> parameter should contain a prefix of {non-ascii}.String type, the maximum length is 256
<errcode>	The result of delete a file, 0 is success, others are failure, please refer to chapter 4.

2.8 AT+CFTPSCWD Change the current directory on FTP(S) server

You can use this command to change the current directory on FTP(S) sever. Make sure you have login to FTP(S) server successfully before AT+CFTPSCWD

AT+CFTPSCWD Change the current directory on FTP(S) server	
Test Command AT+CFTPSCWD=?	Response +CFTPSCWD: "DIR" OK
Execute Command AT+CFTPSCWD="<dir>"	Response a) change current directory successfully: OK +CFTPSCWD: 0 b) if failed: OK + CFTPSCWD: <errcode> c)if parameter format or any other error occurs: ERROR

Defined Values

<dir>	The directory to be changed. If the directory contains non-ASCII characters, the <dir> parameter should contain a prefix of {non-ascii}.String type, the maximum length is 256.
<errcode>	The result of change the current directory, 0 is success, others are failure, please refer to chapter 4

2.9 AT+CFTPSPWD Get the current directory on FTP(S) server

This command is used to get the current directory on FTPS server. Before AT+CFTPSPWD, please make sure you have login to FTP(S) server successfully

AT+CFTPSPWD Get the current directory on FTP(S) server	
Execute Command AT+CFTPSPWD	<p>Response</p> <p>a)if get the current directory successfully: +CFTPSPWD: "<dir>" OK</p> <p>b)if failed: + CFTPSPWD: <errcode></p> <p>ERROR</p> <p>c)if parameter format or any other error occurs: ERROR</p>

Defined Values

<dir>	The name of the file to be deleted. If the file name contains non-ASCII characters, the <filename> parameter should contain a prefix of {non-ascii}.String type, the maximum length is 256.
<errcode>	The result of change current directory, 0 is success, others are failure, please refer to chapter 4

2.10 AT+CFTPSTYPE Set the transfer type on FTP(S) server

This command is used to set the transfer type on FTP(S) server, please make sure you have login to FTP(S) server before AT+CFTPSTYPE.

AT+CFTPSTYPE Set the transfer type on FTPS server	
Test Command AT+CFTPSTYPE=?	<p>Response</p> <p>+CFTPSTYPE: (A,I) OK</p>
Read Command AT+CFTPSTYPE?	<p>Response</p> <p>+CFTPSTYPE: <type> OK</p>
Write Command AT+CFTPSTYPE=<type>	<p>Response</p> <p>a)if set type successfully: OK +CFTPSTYPE:0</p> <p>b)if set type failed: OK +CFTPSTYPE:<errcode></p> <p>c)if parameter format or any other errors: ERROR</p>

Defined Values

<type>	The type of transferring:
---------------------	---------------------------

<errcode>	<p>A – ASCII. I– Binary The result of set type, 0 is success, others are failure, please refer to chapter 4.</p>
-----------	--

2.11 AT+CFTPSLIST List the items in the directory on FTP(S) server

This command is used to list the items in the specified directory on FTP(S) server. Module will output the items to serial port when list items successfully. Make sure that you have login to FTP(S) server successfully.

AT+CFTPSLIST List the items in the directory on FTP(S) server	
<p>Execute Command AT+CFTPSLIST="<dir>"</p>	<p>Response a)if list items successful: OK +CFTPSLIST: DATA,<len> ... +CFTPSLIST:0 b)if failed: OK +CFTPSLIST:<errcode> d)if parameter format or any other errors: ERROR</p>

Defined Values

<dir>	<p>The directory to be listed. If the directory contains non-ASCII characters, the <dir> parameter should contain a prefix of {non-ascii}.String type, the maximum length is 256</p>
<errcode>	<p>The result code of the listing.0 is success, others are failure, please refer to chapter 4.</p>

2.12 AT+CFTPSGETFILE Get a file from FTP(S) server to module

You can download a file from FTP(S) server to module, by setting parameter <dir>, you can select the directory where to save the downloaded file. Default the downloaded file will be saved to directory “/data/media/”.Make sure that you have login to FTP(S) server successfully before AT+CFTPSGETFILE.

Note: By setting <dir> to 4, you can download CA files to directory “/mssl_cert”, which is used for SSL verification, Details please refer to SIM7500_SIM7600_SIM7800Series_SSL_AT_Commands_Manual.

AT+CFTPSGETFILE Download a file from FTP(S) to module	
<p>Test Command AT+CFTPSGETFILE=?</p>	<p>Response +CFTPSGETFILE: [{non-ascii}]"FILEPATH"[(1-4)] OK</p>

Execute Command AT+CFTPSGETFILE= "<filepath>" [,<dir>]	Response a) if download file successfully : OK +CFTPSGETFILE: 0 b) if failed: OK +CFTPSGETFILE: <errcode> c) if parameter format or any other errors: ERROR
--	--

Defined Values

<filepath>	The remote file path. When the file path doesn't contain "/", this command transfers file from the current remote FTPS directory. If the file path contains non-ASCII characters, the file path parameter should contain a prefix of {non-ascii}.String type, maximum length is 256
< dir >	The directory to save the downloaded file. Numeric type, range is 1-4 , default is 1(/cache) 1 – F:/ (/cache) 2 – D:/ (sd card) 3 – E:/ (/data/media/) 4 – /mssl_cert/(this is for CA file downloading)
<errcode>	The result code of download file from FTP(s) server. 0 is success, others are failure, please refer to chapter 4.

2.13 AT+CFTPSPUTFILE Put a file from module to FTP(S) server

You can use this command to upload a file to FTP(S) server from module. By setting parameter <dir> you can select the directory that contains the file to be uploaded. Make sure that you have login to the FTP(S) server successfully before AT+CFTPSPUTFILE.

AT+CFTPSGETFILE Download a file from FTP(S) to module	
Test Command AT+CFTPSPUTFILE=?	Response +CFTPSPUTFILE: [{non-ascii}]"FILEPATH"[,(1-3),(0-2147483647)] OK
Execute Command	Response

AT+CFTSPUTFILE= “<filepath>” [,<dir>,<rest_size>]	a)if upload file successfully : OK +CFTSPUTFILE: 0 b)if failed: OK +CFTSPUTFILE: <errcode> c)if parameter format i or any other errors: ERROR
--	---

Defined Values

<filepath>	The remote file path. When the file path doesn't contain “/”, this command transfers file to the current remote FTPS directory. If the file path contains non-ASCII characters, the file path parameter should contain a prefix of {non-ascii}.String type, maximum length is 256.
< dir >	The directory that contains the uploaded file. Numeric type, range is 1-3, default is 1(/cache) 1 – F:/ (/cache) 2 – D:/(sd card) 3 – E:/ (/data/media/)
<rest_size>	The value for FTP “REST” command which is used for broken transfer when transferring failed last time. Numeric type, the range is from 0 to 2147483647.
<errcode>	The result code of download file from FTP(S) server. 0 is success, others are failure, please refer to chapter 4.

2.14 AT+CFTPSGET Get a file from FTP(S) server to serial port

You can use this command to get a file from FTP(S) server to serial port. By setting <using_cache> to 1, you can use AT+CFTPSCACHERD to output the file data to serial port after “+CFTPS: RECV EVENT” received.

AT+CFTPSGET Get a file from FTPS server to serial port	
Test Command AT+CFTPSGET=?	Response +CFTPSGET:[{non-ascii}]"FILEPATH"[,<rest_size>[(0-1)]] OK
Execute Command AT+CFTPSGET=“<filepath>”[,<rest_size>[,<using_cache>]]	Response a)if<using_cache> is 0(default),and get file successfully : OK

```

+CFTPSGET: DATA,<len>
...
+CFTPSGET: DATA, <len>
...
...
+CFTPSGET: 0
b) if <using_cache> is 1 and get file successfully:
OK
+CFTPS: RECV EVENT

AT+CFTPSCACHERD?//you can use this command to
//check the size of the received
//data
+CFTPSCACHERD: 102400
OK

//output cached data now:
AT+CFTPSCACHERD
+CFTPSGET: DATA,<len>
.....
OK
.....
+CFTPSGET: 0
c)if failed:
OK

+CFTPSGET:<errcode>

d)if parameter format or any other errors:
ERROR

```

Defined Values

<filepath>

The remote file path. When the file path doesn't contain "/", this command transfer file from the current remote FTPS directory. If the file path contains non-ASCII characters, the file path parameter should contain a prefix of {non-ascii}.String type, maximum length is 256.

<rest_size>

The value for FTP "REST" command which is used for broken transfer when transferring failed last time. Numeric type, the range is from 0 to 2147483647

<using_cache>

Numeric, rang is 0-1
0–Do not use cache, module will output the items data to serial port when list successfully.

<errcode>	<p>1 – Use cache, module will report “+CFTPS: RECV EVENT” when list successfully (Data will be output using AT+CFTPSCACHERD command)</p> <p>The result code of download file from FTP(s) server. 0 is success, others are failure, please refer to chapter 4.</p>
-----------	---

2.15 AT+CFTPSPUT Put a file to FTP(S) server through serial port

You can put a file to FTP(S) server through serial port. Make sure that you have login to FTP(S) server successfully.

AT+CFTPSPUT Put a file to FTP(S) server through serial port	
Test Command AT+CFTPSPUT=?	Response OK
Execute Command AT+CFTPSPUT=<filepath> [,<len>,<rest_size>]	Response a)if upload file through serial port successfully: OK +CFTPSPUT: 0 b)if failed before input data: +CFTPSPUT:<errcode> ERROR c)if failed after input data: OK +CFTPSPUT:<errcode> d)if parameter format or any other errors: ERROR

Defined Values

<filepath>	<p>The remote file path. When the file path doesn't contain “/”, this command transfers file to the current remote FTPS directory. If the file path contains non-ASCII characters, the file path parameter should contain a prefix of {non-ascii}.String type, maximum length is 256.</p>
<len>	<p>Numeric type, The length of the data to send, the maximum length is 2048.if parameter <len> is omitted, Each <Ctrl+Z>character present in the data flow of serial port when</p>

	<p>downloading FTP data will be coded as <ETX><Ctrl+Z>. Each <ETX> character will be coded as <ETX><ETX>. Single <Ctrl+Z> means end of the FTP data. <ETX> is 0x03, and <Ctrl+Z> is 0x1A.</p> <p>The value for FTP “REST” command which is used for broken transfer when transferring failed last time. Numeric type, the range is from 0 to 2147483647.</p>
<rest_size>	
<errcode>	<p>The result code of upload data to FTP(s) server. 0 is success, others are failure, please refer to chapter 4.</p>

2.16 AT+CFTPSSINGLEIP Set FTP(S) data socket address type

This command is used to set FTPS server data socket IP address type. For some FTP(S) server, it is needed to set AT+CFTPSSINGLEIP=1. Please make sure to set AT+CFTPSSINGLEIP before AT+CFTPSLOGIN.

AT+CFTPSPUT Put a file to FTP(S) server through serial port	
Test Command AT+CFTPSSINGLEIP=?	Response +CFTPSSINGLEIP: (0,1) OK
Execute Command AT+CFTPSSINGLEIP=<singleip>	Response a) If parameter format is right and set successfully: OK b) If parameter format is not right or any other error occurs: ERROR

Defined Values

<singleip>	<p>The FTPS data socket IP address type:</p> <p><u>0</u> – decided by PORT response from FTPS server</p> <p>1 – the same as the control socket.</p>
------------	---

2.17 AT+CFTPSCACHERD Output cached data to MCU

You can use this command to output cached data (generated by AT+CFTPSGET/AT+CFTPSLIST) to MCU. The parameter <using_cache> of AT+CFTPSGET/AT+CFTPSLIST must be set to 1 when you want to use AT+CFTPSCACHERD

AT+CFTPSCACHERD Output cached data to MCU	
Read Command AT+CFTPSCACHERD?	Response +CFTPSCACHERD: <len> OK
Execute Command AT+CFTPSCACHERD	Response a) If cache data is AT+CFTPSGET, and everything goes well:

	<pre>+CFTPSGET: DATA,<out_len><CR><LF> ... OK</pre> <p><i>b) If the cache data is AT+CFTPSLIST and everything goes well:</i></p> <pre>+CFTPSLIST: DATA,<out_len><CR><LF> ... OK</pre>
--	---

Defined Values

<len>	Numeric type, The bytes of data cached in FTPS module.
<out_len>	The bytes of data to output. The maximum value is 1024 for each AT+CFTPSCACHERD calling.

2.18 AT+CFTPSABORT Abort FTP(S) operations

You can use this command abort any ftp(s) operation. If execute AT+CFTPSABORT, it will logout FTP(S) server and deactive PDP context. Please make sure you have login to FTP(S) server before AT+CFTPSABORT.

AT+CFTPSABORT Abort FTP(S) operations	
<p>Execute Command AT+CFTPSABORT</p>	<p>Response</p> <p>a) if abort FTP(S) operation successfully: OK</p> <p>+CFTPSABORT: 0</p> <p>b) if failed: OK</p> <p>+CFTPSABORT: <errcode></p> <p>c) if any other error occurs: ERROR</p>

<errcode>	The result code of abort FTP(s) operation. 0 is success, others are failure, please refer to chapter 4
------------------------	--

3 Example

Before all FTP(S) related operations, we should ensure the followings:

- a) ensure GPRS network is available:

AT+CSQ

+CSQ: 23,0

OK

AT+CREG?

+CREG: 0,1

OK

AT+CGREG?

+CGREG: 0,1

OK

- b) PDP context Enable:

//Specify the parameter value of the PDP context corresponding to cid

AT+CGSOCKCONT=1,"IP","CMNET"

OK

AT+CGPADDR

+CGPADDR: 1,10.49.14.68 //ensure the first PDP context get a IP address

+CGPADDR: 4,0.0.0.0

OK

Note: usually CSOCKAUTH and CSOCKSETPN parameter are kept default if not care about.

3.1 Access to FTP server

3.1.1 Download a file from FTP server to module/upload a file to FTP server from module

Following commands show us how to login to a FTP server, list the current directory items get the current directory and download a file to module "E:".

```
AT+CFTPSSTART //start FTP service
```

```
OK
```

```
+CFTPSSTART: 0
```

```
AT+CFTPSSINGLEIP=1 //set data connection use the same address of control connection
```

```
OK
```

```
AT+CFTPSLOGIN="serveraddr",21,"username","password",0//login to a FTP server
```

```
OK
```

```
+CFTPSLOGIN: 0
```

```
AT+CFTPSLIST="/" //list all items of directory "/"
```

```
OK
```

```
+CFTPSLIST: DATA,1024
```

```
drw-rw-rw-  1 user  group      0 Aug 23 15:37 .  
drw-rw-rw-  1 user  group      0 Aug 23 15:37 ..  
-rw-rw-rw-  1 user  group      4 Aug 11  2016 008test  
-rw-rw-rw-  1 user  group    5505024 Jun  7 17:27 0529-0607.zip  
drw-rw-rw-  1 user  group      0 Apr  8 19:15 1  
-rw-rw-rw-  1 user  group    1388870 Apr 27  2017 1.isf  
-rw-rw-rw-  1 user  group      2 Aug 23  2016 1.txt
```

```
-rw-rw-rw-  1 user    group      21 Jan 15  2018 11.txt
-rw-rw-rw-  1 user    group      41 Apr  8 19:32 11111.txt
-rw-rw-rw-  1 user    group    327680 Mar 15  2017 111ww.txt
```

+CFTPSLIST: 0

AT+CFTPSPWD//get current directory of FTP server

+CFTPSPWD: "/"

OK

AT+CFTPSGETFILE="111ww.txt",0

//download a file from FTP server to module directory "E:/"

OK

+CFTPSGETFILE: 0

AT+FSCD=E:://change current directory to "E:/"

+FSCD: E:/

OK

AT+FSL//list all items in "E:/"

+FSL: FILES:

111ww.txt

OK

AT+CFTPSPUTFILE="Code_204_NOK.qmdl"

//upload file from /data/media to FTP server

OK

+CFTPSPUTFILE: 0

```
AT+CFTPSLOGOUT //logout FTP server
```

```
+CFTPSLOGOUT: 0
```

```
OK
```

```
AT+CFTPSSTOP //stop FTP service
```

```
OK
```

```
+CFTPSSTOP: 0
```

3.1.2 Download a file from FTP server to serial port/upload a file to FTP server from serial port

Following commands show us how to download a file from FTP server to serial port and how to upload a file from serial port to FTP server.

```
AT+CFTPSSTART
```

```
OK
```

```
+CFTPSSTART: 0
```

```
AT+CFTPSSINGLEIP=1
```

```
OK
```

```
AT+CFTPSLOGIN="serveraddr",21,"uename","password",0//login to a FTP server
```

```
OK
```

```
+CFTPSLOGIN: 0
```

```
PB DONE
```

```
AT+CFTPSLIST="/"
```

```
OK
```

```
+CFTPSLIST: DATA,1024
```

```
drw-rw-rw-  1 user  group      0 Aug 23 15:37 .
drw-rw-rw-  1 user  group      0 Aug 23 15:37 ..
-rw-rw-rw-  1 user  group      4 Aug 11  2016 008test
-rw-rw-rw-  1 user  group    5505024 Jun  7 17:27 0529-0607.zip
drw-rw-rw-  1 user  group      0 Apr  8 19:15 1
-rw-rw-rw-  1 user  group    1388870 Apr 27  2017 1.isf
-rw-rw-rw-  1 user  group      2 Aug 23  2016 1.txt
-rw-rw-rw-  1 user  group     21 Jan 15  2018 11.txt
-rw-rw-rw-  1 user  group     41 Apr  8 19:32 11111.txt
-rw-rw-rw-  1 user  group    327680 Mar 15  2017 111ww.txt
```

+CFTPSLIST: 0

AT+CFTPSPWD//get current directory of FTP server

+CFTPSPWD: "/"

OK

AT+CFTPSPUT="wwwputsss"

//upload a file from serial port, please start to input data while ">"received.

>aa//this is what you input to serial port.

OK

+CFTPSPUT: 0

AT+CFTPSGET="wwwputsss"

//download the file sent by AT+CFTPSPUT from FTP server to serial port.

OK

+CFTPSGET: DATA,78

AT+CFTPSLOGOUT//logout FTP server

```
+CFTPSLOGOUT: 0
```

```
OK
```

3.2 Access to FTPS server

3.2.1 Download a file from FTPS server to module/upload a file to FTPS server from module

Following commands show us how to download a file from FTPS sever to module and how to upload a file from module to FTPS server:

```
AT+CFTPSSTART
```

```
OK
```

```
+CFTPSSTART: 0
```

```
AT+CFTPSSINGLEIP=1
```

```
OK
```

```
AT+CFTPSLOGIN="serveraddr",990,"uername","password",3 //login to a FTPS server
```

```
OK
```

```
+CFTPSLOGIN: 0
```

```
AT+CFTPSLIST="/"
```

```
OK
```

```
+CFTPSLIST: DATA,963
```

```
-rw-r--r-- 1 ftp ftp          8 Apr 13  2018 t0411982.txt
-rw-r--r-- 1 ftp ftp          8 Apr 13  2018 t0411988.txt
-rw-r--r-- 1 ftp ftp         88 Apr 11  2018 t0412.txt
-rw-r--r-- 1 ftp ftp        88 Aug 21 11:12 t0821234567.txt
```

```
-rw-r--r-- 1 ftp ftp          10 Jun 15  2018 t1.txt
-rw-r--r-- 1 ftp ftp          10 Apr 17  2018 t2.txt
-rw-r--r-- 1 ftp ftp          24 Dec 11  2017 T912.TXT
-rw-r--r-- 1 ftp ftp          10 Mar 13  2018 T91www2.TXT
-rw-r--r-- 1 ftp ftp          10 Mar 13  2018 T91www2s.TXT
-rw-r--r-- 1 ftp ftp      477640 Sep 17 14:43 TESA
-rw-r--r-- 1 ftp ftp          10 Apr 24  2018 tesssst
-rw-r--r-- 1 ftp ftp          10 Jul 27  2018 TEST009.TXT
drwxr-xr-x 1 ftp ftp              0 Aug 21 11:04 test011
-rw-r--r-- 1 ftp ftp          20 Apr 13  2018 test04111.txt
drwxr-xr-x 1 ftp ftp              0 Dec 10  2017 TESTAB4
drwxr-xr-x 1 ftp ftp              0 Dec 10  2017 TESTAB5
-rw-r--r-- 1 ftp ftp      18158 Aug 07  2017 update2.zip
```

+CFTPSLIST: 0

AT+CFTPSPWD//get current directory of FTP server

+CFTPSPWD: "/"

OK

AT+CFTPSGETFILE="update2.zip",0

//download a file from FTPS server to module directory"E:"

OK

+CFTPSGETFILE: 0

AT+FSCD=E://change current directory to E:/

+FSCD: E:/

OK

AT+FSL//list all items in directory E:/

+FSL: FILES:

POST_JPG.DAT

update2.zip

OK

AT+CFTPSPUTFILE="Code_204_NOK.qmdl"

//upload a file from "E:/" to FTPS server

OK

+CFTPSPUTFILE: 0

AT+CFTPSLOGOUT// log out FTPS server

+CFTPSLOGOUT: 0

OK

AT+CFTPSSTOP //deactive the PDP context, stop FTP service.

+CFTPSSTOP: 0

OK

3.2.2 Download a file from FTPS server to serial port/upload a file to FTPS server from serial port

Following commands show us how to download a file form FTPS sever to serial port and how to upload a file from serial port to FTPS server:

AT+CFTPSSTART

OK

+CFTPSSTART: 0

AT+CFTPSSINGLEIP=1

OK

AT+CFTPSLOGIN="serveraddr",990,"uename","password",3//login to a FTPS server

OK

+CFTPSLOGIN: 0

AT+CFTPSLIST="/"

OK

+CFTPSLIST: DATA,963

```
-rw-r--r-- 1 ftp ftp          8 Apr 13  2018 t0411982.txt
-rw-r--r-- 1 ftp ftp          8 Apr 13  2018 t0411988.txt
-rw-r--r-- 1 ftp ftp        88 Apr 11  2018 t0412.txt
-rw-r--r-- 1 ftp ftp      88 Aug 21 11:12 t0821234567.txt
-rw-r--r-- 1 ftp ftp        10 Jun 15  2018 t1.txt
-rw-r--r-- 1 ftp ftp        10 Apr 17  2018 t2.txt
-rw-r--r-- 1 ftp ftp        24 Dec 11  2017 T912.TXT
-rw-r--r-- 1 ftp ftp        10 Mar 13  2018 T91www2.TXT
-rw-r--r-- 1 ftp ftp        10 Mar 13  2018 T91www2s.TXT
-rw-r--r-- 1 ftp ftp    477640 Sep 17 14:43 TESA
-rw-r--r-- 1 ftp ftp        10 Apr 24  2018 tesssst
-rw-r--r-- 1 ftp ftp        10 Jul 27  2018 TEST009.TXT
drwxr-xr-x 1 ftp ftp          0 Aug 21 11:04 test011
-rw-r--r-- 1 ftp ftp        20 Apr 13  2018 test04111.txt
drwxr-xr-x 1 ftp ftp          0 Dec 10  2017 TESTAB4
drwxr-xr-x 1 ftp ftp          0 Dec 10  2017 TESTAB5
```

```
-rw-r--r-- 1 ftp ftp          18158 Aug 07 2017 update2.zip
```

```
+CFTPSLIST: 0
```

```
AT+CFTPSPWD//get current directory of FTP server
```

```
+CFTPSPWD: "/"
```

```
OK
```

```
AT+CFTPSPUT="wwwpute",10
```

```
//upload a file from serial to FTPS server
```

```
>qqqqqqqqqq//this is what you input to serial port.
```

```
OK
```

```
+CFTPSPUT: 0
```

```
AT+CFTPSGET="wwwpute",0
```

```
//download the file uploaded by AT+CFTPSPUT to serial port
```

```
OK
```

```
+CFTPSGET: DATA,10
```

```
bbbbbbbbbb
```

```
+CFTPSGET: 0
```

```
AT+CFTPSLOGOUT// log out FTPS server
```

```
+CFTPSLOGOUT: 0
```

```
OK
```

```
AT+CFTPSSTOP
```

```
//deactive the PDP context, stop FTP service.
```

```
+CFTPSSTOP: 0
```

OK

4 Summary of FTP Error Code

FTP error code:.

<errorcode>	Meaning
0	Success
1	SSL alert
2	Unknown error
3	Busy
4	Connection closed by server
5	Timeout
6	Transfer failed
7	File not exists or any other memory error
8	Invalid parameter
9	Operation rejected by server
10	Network error
11	State error
12	Failed to parse server name
13	Create socket error
14	Connect socket failed
15	Close socket failed
16	SSL session closed
17	File error, file not exist or other error.
421	Server response connection time out, while received error code 421, you need do AT+CFTPSLOGOUT to logout server then AT+CFTPSLOGIN again for further operations.