



## Features

- Excellent network, equipped with CAT-1 Network, 10Mbps download, 5Mbps upload, meeting 80% of data transmission application scenarios;
- Low latency, equipped with 4G network, millisecond-level latency experience;
- Wide coverage, based on existing operators 4G Network, high stability;
- Support network transparent transmission function, the serial port data is directly transmitted to the network end, simple and reliable;
- Support KEEP-ALIVE Mechanism, which can keep the connection alive and enhance the stability of the connection;
- support 20 data caches, each data up to 4K;
- Support registration package, heartbeat package data;
- Supports base station positioning and NTP time update;
- Multiple parameter setting methods: network, serial port AT command and computer terminal setting software configuration;
- With a security mechanism, you can set the command mode login password;
- A variety of indicator lights, convenient and accurate status judgment;
- Support FOTA Self-upgrade, upgrade EZDTU's own firmware.

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# 1 Command introduction

This document provides a detailed description of AT commands supported by EZDTU.

After starting EZDTU and sending the power-on message, if EZDTU is in AT command mode, EZDTU will be able to receive and process

AT commands.

The instruction is not a "question-and-answer" instruction, which is divided into two parts: "question" and "answer". "Q" means that the device sends AT commands to EZDTU, and "answer" means that EZDTU replies to the device.

surface1 Symbol description

symbol name	meaning
<>	Included content is required
[]	Included content is optional
{}	The included content is a string with special meaning in this document
~	range of parameters, e.g. A~B, the range of parameters is from A to B
cmd	Indicates the instruction code
OP	representation operator
PARA	Indicates parameters
CR	express "Carriage return" in ASCII code, expressed as 0x0D in hexadecimal
LF	express "Line break" in ASCII code, represented as 0x0A in hexadecimal

## 1.1 The format of "ask" in the command

Command string: <AT+><CMD>[OP]

[PARA]<CR>

surface2 Symbol description

command code	meaning	Is it necessary
AT+	AT command header	yes
cmd	Functional properties of instructions	yes
OP	Operators such as =, ?, =?	no
PARA	Execution parameters	no
CR	carriage return, end of command	yes

Instruction type description:

surface3 Symbol Description

type	command string format	illustrate

0	<AT+><CMD>?<CR>	Execute the action of the instruction or query the current parameter value
1	<AT+><CMD><CR>	Execute the action of the instruction or query the current parameter value
2	<AT+><CMD>=?<CR>	Query the value range or type of the parameter in the command
3	<AT+><CMD>=<PARAM><CR>	Set the parameter value of the command

## 1.2 The format of "answer" in the command

Note: The response information of the command is divided into two types: with echo and without echo. The meaning of echo is that when the command is input, EZDTU will return the input content first, and then respond to the command. No echo means that EZDTU will not return the input content, but only respond to commands. In the following descriptions, the echo-free mode is taken as an example.

Command string: [CR][LF][+CMD][OP][PARAM][CR][LF]<CR><LF>[OK]<CR><LF>

surface4 Symbol Description

comm and code	meaning	Is it necessary
CR	carriage return	yes
LF	line break	yes
+CMD	response header	no
OP	operators, such as:	no
PARA	Returned parameters	no
CR	carriage return	no
LF	line break	no
CR	carriage return	yes
LF	line break	yes
OK	Indicates that the operation was successful	no
CR	carriage return	yes
LF	line break	yes

### 1.3 command error code

surface5 command error code

value	meaning
Err: 1	This command is not supported
Err: 2	Command does not conform to query or set format
Err: 3	The parameter value range or the number of parameters is wrong
Err: 4	The parameter is locked and cannot be modified or read

### 1.4 AT command configuration

EZDTU is powered on and works in transparent transmission mode, and EZDTU can be switched to "command mode" by sending specific timing data to the serial port. After completing the operation in the "command mode", EZDTU returns to the transparent transmission mode by sending a specific command.

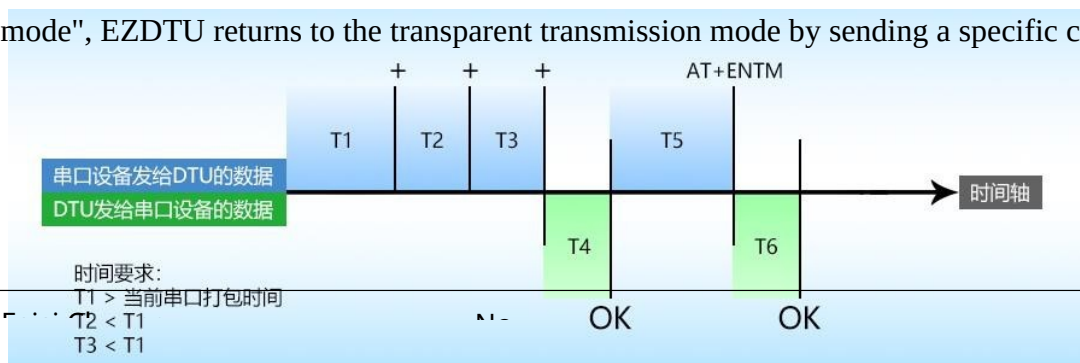


Figure13.1 Switch command mode timing

The timing of switching from transparent transmission mode to command mode:

- 1) while sending "+++" before a serial packet time can not send any data.
- 2) EZDTU After receiving "+++", reply "OK" to the serial device and enter "command mode".

- 3) After the serial device receives "OK", it knows that the module has entered the "command mode", and can send A to it.T command.

The timing of switching from command mode to transparent transmission mode:

- 1) The serial device sends the command "AT+ENTM" to EZDTU followed by carriage return, 16The hexadecimal representation is 0x0D 0x0A.
- 2) EZDTU After receiving the command, send "OK" to the serial device and return to the transparent transmission mode.
- 3) The serial device receives "OK" and know that EZDTU has returned to the transparent transmission mode.

## 2 Description of serial port actively reporting information

table6Description of serial port actively reporting information

report information	informat ion descripti on	
FS @UNAUTHORIZED	Module not licensed	timingSend once every 10 seconds, please contact Phase One Create an authorization code
FS@CPIN READER	reading card	
FS@CPIN READY	Read card successfully	
FS@CPIN ERROR	Failed to read card	No SIM card read within 30 seconds
FS@CREG READY	Network registration is successful	
FS@CREG ERROR	Network registration failed	Not registered on the network within 2 minutes, or registered to unregistered
FS@CSQ:<csq>	current signal strength	<csq>: signal strength
FS@CSQ LOW	low signal quality	timingSend once a minute, signal threshold can be set value
FS@SEND BUF FULL:<s>	socket send buffer is full	<s>: Socket number
FS@RESET: <tag>	device restart	<tag>: restart reason 1: AT+Z command restart 2: Save the parameters and restart 3: Restore factory settings and restart 4: Set the authorization code and restart successfully 5: The firmware upgrade is successfully



		<p>restarted</p> <p>6: The SIM card is not inserted, and it is not detected within 30 seconds after power onSIM card restarts automatically</p> <p>7: New registration failed, registration within 2 minutesInternet automatically restarts</p> <p>8: The server failed to reconnect and restart</p> <p>9: Automatic restart without data</p> <p>10: Firmware upgrade fails and restarts</p>
Channel state information for the TCP protocol		
FS@TCP INIT OK:<s>	TCP initialization successful	<s>: Socket number
FS@TCPINIT FAIL:<s>	TCP initialization failed	<s>: Socket number
FS@TCP CONNECTED:<s>	TCP connection succeeded	<s>: Socket number
FS@TCP CONNECT FAIL: <s>	TCP connection failed	<s>: Socket number

FS@TCP DISCONNECT:<s>,<tag>	TCP connection broken	<s>: Socket number <tag>: disconnect reason 0: short connection timeout disconnect 1: abnormal disconnection due to unknown reasons 2: Actively disconnect when the network drops 3: Active disconnection when data transmission fails 4: The server actively disconnects
Channel state information for UDP protocol		
FS@UDP OK:<s>	UDP initial completion	<s>: Socket number
FS@UDP FAIL:<s>	UDP initial failure	<s>: Socket number
FS@UDP CLOSE:<s>	UDP off	<s>: Socket number
Channel state information for the HTTP protocol		
FS@HTTP OK:<s>	HTTP initial completion	<s>: Socket number
Channel status information of the MQTT protocol		
FS@MQTT INIT OK:<s>	MQTT initialization succeeded	<s>: Socket number
FS@MQTT CONNECTED: <s>	MQTT login succeeded	<s>: Socket number
FS@MQTT CONNECT FAIL: <s>	MQTT login failed	<s>: Socket number
FS@MQTT DISCONNECT: <s>	MQTT connection disconnected	<s>: Socket number
FS@MQTT SUBSCRIBED: <s>	MQTT subscription topic subscription successful	<s>: Socket number
FS@MQTT SUBSCRIBE FAIL: <s>	MQTT subscription topic subscription failed	<s>: Socket number

### 3 ATInstruction Set

Table7ATInstruction Set

serial number	instruction	Functional description
General Instructions		
1	AT	test
2	AT+Z	restart mod
3	AT+S	Save configuration and reboot
4	AT+CLEAR	factory reset and reboot
5	AT+E	Inquire/set echo enable
6	AT+ENTM	Exit configuration mode
7	AT+WKMOD	Inquire/set working mode
8	AT+STMSG	Inquire/set boot information
9	AT+RSTIM	Inquire/Set device restart time without data
10	AT+PARMSVER	Inquire/set parameter version
11	AT+AUTH	Query/Set authorization code

12	AT+DEBUG	Inquire/Set debug information enable
13	AT+LINKDEBUG	Inquire/Set active reporting channel connection information enable
14	AT+APN	query/setAPN information
15	AT+FOTA	Firmware remote upgrade
16	AT+SAFEATEN	Inquire/set security mechanism enable
17	AT+SIGNINAT	Inquire/Set security mechanism login password
Information query command		

1	AT+CSQ	Query signal strength
2	AT+VER	Query the firmware version number
3	AT+BUIDL	Query firmware compilation time
4	AT+SN	InquireSN code
5	AT+IMEI	InquireIMEI number
6	AT+ICCID	InquireICCID code
7	AT+CIP	Query local IP
8	AT+CREG	Query network registration status
9	AT+LBS	Query cell base station information
10	AT+CCLK	query time
11	AT+RUNST	Query the running status of the module
Serial parameter command		
1	AT+UART	Inquire/Set serial port parameters
2	AT+UARTFL	Inquire/Set the serial port packing length
3	AT+UARTFT	Inquire/Set serial port packing time
Socket command		
1	AT+SOCK	query/setSocket parameter
2	AT+SOCKSSL	Query/set Socket SSL enable
3	AT+SOCKEN	query/setSocket enable
4	AT+SOCKLK	InquireSocket connection status
5	AT+SOCKSL	query/setSocket short connection enable
6	AT+KEEPALIVE	query/setSocket's Keep Alive parameter
7	AT+SHORT™	Inquire/Set Socket short connection timeout
8	AT+SOCKRSNUM	query/setSocket maximum reconnection times
9	AT+SOCKRSTIM	query/setSocket reconnection interval
Registry Package Directives		
1	AT+REGEN	query/setSocket registration package enable
2	AT+REGTP	Inquire/Set Socket registration package content type
3	AT+REGDT	query/setSocket registration package custom registration information
4	AT+REGSND	Inquire/Set the sending method of Socket registration package
Heartbeat command		
1	AT+HEARTEN	query/setSocket heartbeat packet enable
2	AT+HEARTTP	query/setSocket heartbeat packet sending method
3	AT+HEARTDT	query/setSocket heartbeat packet data
4	AT+HEARTTM	Inquire/Set Socket heartbeat packet sending interval
5	AT+HEARTSORT	Inquire/Set Socket heartbeat packet data type
MQTT command		
1	AT+MQTTSV	query/setMQTT server parameters
2	AT+MQTTSSL	Query/set MQTT SSL enable
3	AT+MQTTCONN	query/setMQTT server connection parameters

4	AT+MQTTSUB	query/setMQTT Subscription Parameters
5	AT+MQTTPUB	query/setMQTT publish parameters
6	AT+MQTTWLEN	query/setMQTT Will Enabler
7	AT+MQTTWLTP	query/setMQTT Will Topic
8	AT+MQTTWLDT	query/setMQTT Will Message
HTTP command		
1	AT+HTPTP	Query/set HTTP request method

2	AT+HTPSSL	Query/set HTTP SSL enable
3	AT+HTPURL	Query/set the URL of the HTTP request
4	AT+HTPHD	Query/set HTTP request header information
5	AT+HTPSV	Inquire/ Set server parameters for HTTP requests
6	AT+HTPPK	Inquire/Set HTTP whether to enable filtering packet header
7	AT+HTPTIM	Query/set the timeout of HTTP requests
NTP commands		
1	AT+NTPEN	Inquire/Set NTP time synchronization function enable
2	AT+NTPSVR	Query/set NTP server parameters
3	AT+NTPTM	Inquire/set NTP timing cycle

## 4 ATDetailed instructions

### 4.1General Instructions

#### 4.1.1 ATtest

Function	illustrate	Examples and Remarks
execute command	AT OK	

#### 4.1.2 AT+Zrestart mod

Function	illustrate	Examples and Remarks
execute command	AT+Z OK	

#### 4.1.3 AT+SSave configuration and reboot

Function	illustrate	Examples and Remarks
execute command	AT+S OK	

### 4.1.4 AT+CLEAR factory reset and reboot

Function	illustrate	Examples and Remarks
execute command	AT+CLEAR OK	

### 4.1.5 AT+EQuery/set echo enable

Function	illustrate	Examples and Remarks
test command	AT+E=? +E:<status> OK	AT+E=? +E:<ON,OFF> OK
query command	AT+E or AT+E? +E:<status> OK	AT+E +E:ON OK
set command	AT+E=<status> OK	AT+E=ON OK
parameter		
status	echo status ON: Open OFF: Close	Default value: ON

### 4.1.6 AT+ENTMExit configuration mode

Function	illustrate	Examples and Remarks
execute command	AT+ENTM OK	



### 4.1.7 AT+WKMODQuery/set working mode

Function	illustrate	Examples and Remarks
test command	AT+WKMOD=? +WKMOD:<mode>  OK	AT+WKMOD=? +WKMOD:<NET,HTTP,MQTT>  OK
query command	AT+WKMOD or AT+WKMOD? +WKMOD:<mode>  OK	AT+WKMOD? +WKMOD:NET  OK
set command	AT+WKMOD=<mode>  OK	AT+WKMOD=NET  OK
parameter		
<b>mode</b>	Operating mode NET: Network transparent transmission mode HTTP: HTTP mode MQTT: MQTT mode	The default is NET

### 4.1.8 AT+STMSGQuery/set startup information

Function	illustrate	Examples and Remarks
test command	AT+STMSG=? +STMSG:<message>  OK	AT+STMSG=? +STMSG:<0~20bytes>  OK
query command	AT+STMSG or AT+STMSG? +STMSG:<message>  OK	AT+STMSG? +STMSG:freestrong  OK
set command	AT+STMSG=<message>  OK	AT+STMSG=freestrong  OK
parameter		

er		
message	Boot information, range: 0~20 bytes	

### 4.1.9 AT+RSTIMQuery/set the restart time without data

Function	illustrate	Examples and Remarks
test command	AT+RSTIM=? +RSTIM:<time>  OK	AT+RSTIM=? +RSTIM:<0,60~65535(s)>  OK
query command	AT+RSTIMor AT+RSTIM? +RSTIM:<time>  OK	AT+RSTIM? +RSTIM:1800  OK
set command	AT+RSTIM=<time>  OK	AT+RSTIM=1800  OK
parameter		
<b>time</b>	No data restart time, range:0, 60~65535(s)	Default: 0 Set as0 is not enabled

### 4.1.10 AT+PARMSVERquery/set parameter version

Function	illustrate	Examples and Remarks
test command	AT+PARMSVER=? +PARMSVER:<number>  OK	AT+PARMSVER=? +PARMSVER:<0~65535>  OK
query command	AT+PARMSVER or AT+PARMSVER? +PARMSVER:<number>  OK	AT+PARMSVER? +PARMSVER:0  OK
set command	AT+PARMSVER=<number>  OK	AT+PARMSVER=0  OK
parameter		
<b>number</b>	Parameter version, range:0~65535	Default: 0

### 4.1.11 AT+AUTHQuery/Set authorization code

Function	illustrate	Examples and Remarks
test command	AT+AUTH=? +AUTH:<authorization> OK	AT+AUTH=? +AUTH:<authorization> OK
query command	AT+AUTH or AT+AUTH? +AUTH:<status> OK	AT+AUTH? +AUTH:0 OK
set command	AT+PARMSVER=<authorization> OK	AT+PARMSVER=NjQ3M*****3QTU2 OK
parameter		
<b>authorization</b>	Authorization code	
<b>status</b>	authorization status 0: Unauthorized 1: Authorized	

### 4.1.12 AT+DEBUGQuery/Set the enablement of actively reporting debugging information

Function	illustrate	Examples and Remarks
test command	AT+DEBUG=? +DEBUG:<status> OK	AT+DEBUG=? +DEBUG:<ON,OFF> OK
query command	AT+DEBUGor AT+DEBUG? +DEBUG:<status> OK	AT+DEBUG? +DEBUG:ON OK
set command	AT+DEBUG=<status> OK	AT+DEBUG=ON OK
parameter		
<b>status</b>	debug information ON: Open OFF: Close	Default value: OFF

### 4.1.13 AT+LINKDEBUGQuery/Set the active reporting channel connection information enable

Function	illustrate	Examples and Remarks
test command	AT+LINKDEBUG=? +LINKDEBUG:<status>  OK	AT+LINKDEBUG=? +LINKDEBUG:<ON,OFF>  OK
query command	AT+LINKDEBUG or AT+LINKDEBUG? +LINKDEBUG:<status>  OK	AT+LINK DEBUG? +LINKDEBUG:ON  OK
set command	AT+LINKDEBUG=<status>  OK	AT+LINKDEBUG=ON  OK
parameter		
status	debug information ON: Open OFF: Close	Defaults:ON

### 4.1.14 AT+APNQuery/Set APN information

Function	illustrate	Examples and Remarks
test command	AT+APN=? +APN:<apn>,<username>,<password>,<auth>  OK	AT+APN=? +APN:<0~50bytes>,<0~50bytes>,<0~50bytes>,<0~2>  OK
query command	AT+APN or AT+APN? +APN:<apn>,<username>,<password>,<auth>  OK	AT+APN? +APN:CMNET,,,0  OK
set command	AT+APN=<apn>,<username>,<password>,<auth>  OK	AT+APN=CMNET,,,0  OK
parameter		

<b>apn</b>	APN, can be empty, range: 0~50 bytes	Defaults:internet
<b>username</b>	Username, can be empty, range: 0~50 bytes	Default: empty
<b>password</b>	Password, can be empty, range: 0~50 bytes	Default: empty
<b>auth</b>	Authentication method, scope:0~2	Default: empty

### 4.1.15 AT+FOTA Firmware remote upgrade

Function	illustrate	Examples and Remarks
execute command	AT+FOTA  OK	AT+FOTA  OK Normal upgrade: FOTA_UPDATE:356137,36395,10.219382% FOTA_UPDATE:356137,71755,20.148145% FOTA_UPDATE:356137,107115,30.076909% ... FOTA_UPDATE: 356137,356137,100.000000% Upgrade failed: FOTA_UPDATE: fail

### 4.1.16 AT+SAFEATEN Query/set security mechanism enable

Function	illustrate	Examples and Remarks
test command	AT+SAFEATEN=? +SAFEATEN:<status>  OK	AT+SAFEATEN=? +SAFEATEN:<ON,OFF>  OK
query command	AT+SAFEATENor AT+SAFEATEN? +SAFEATEN:<status>  OK	AT+SAFEATEN +SAFEATEN:ON  OK
set command	AT+SAFEATEN=<status>  OK	AT+SAFEATEN=ON  OK
parameter		
status	Security Mechanism Enabled Status ON: Open OFF: Close	Default value: OFF

### 4.1.17 AT+SIGNINATQuery/set the security mechanism login password

Function	illustrate	Examples and Remarks
test command	AT+SIGNINAT=? +SIGNINAT:<password>  OK	AT+SIGNINAT=? +SIGNINAT:<0~10bytes>  OK
query command	AT+SIGNINAT or AT+SIGNINAT? +SIGNINAT:<password>  OK	AT+SIGNINAT +SIGNINAT:*****  OK
Setup command/login command	AT+SIGNINAT=<password>  OK	AT+SIGNINAT=1234567890  OK
parameter		
password	Login password, range: 0~10 bytes	Default: empty
instruction description	Login instruction before login, when SAFEATEN is on, read or setYou need to log in before the DTU parameters to operate. After logging in, it is an instruction to modify the login password.	

## 4.2 information query

### 4.2.1 AT+CSQQuery signal quality

Function	illustrate	Examples and Remarks
query command	AT+CSQ or AT+CSQ? +CSQ:<rsssi>  OK	AT+CSQ? +CSQ:27  OK
parameter		



<b>rsi</b>	0: 113 dBm or lower 1: 111dBm 2...30: -109...-53 dBm 31: -51 dBm or higher 99: unknown or undetectable
------------	--

## 4.2.2 AT+VER Query the firmware version number

Function	illustrate	Examples and Remarks
query command	AT+VER or AT+VER? +VER:<version>  OK	AT+VER +VER:EZDTU_XXX_XXX_V1.0.0  OK
parameter		
<b>version</b>	Firmware version	

## 4.2.3 AT+BUILDC Query firmware compilation time

Function	illustrate	Examples and Remarks
query command	AT+BUILDC or AT+BUILDC? +BUILDC:<time>  OK	AT+BUILDC +BUILDC:Apr 18 2022 18:15:49  OK
parameter		
<b>time</b>	Firmware compile time	

## 4.2.4 AT+SN InquireSNcode

Function	illustrate	Examples and Remarks
test command	AT+SN=? +SN:<code>  OK	AT+SN=? +SN:<0~18bytes>  OK
query command	AT+SN or AT+SN? +SN:<code>  OK	AT+SN +SN:2022020287653698  OK
set command	AT+SN=<code>  OK	AT+SN=2022020287653698

d		
parameter		
code	SN code, range: 0~18 bytes, only numbers and letters are supported	

### 4.2.5 AT+IMEI query module'sIMEI

Function	illustrate	Examples and Remarks
query command	AT+IMEI or AT+IMEI? +IMEI:<code>  OK	AT+IMEI +IMEI:86433*****2457  OK
parameter		
code	IMEI code	

### 4.2.6 AT+ICCID query module'sICCID

Function	illustrate	Examples and Remarks
query command	AT+ICCID or AT+ICCID? +ICCID:<code>  OK	AT+ICCID +ICCID:89860*****1314  OK
parameter		
code	ICCID code	

### 4.2.7 AT+CIP Query the current connection locallyIPaddress

Function	illustrate	Examples and Remarks
query command	AT+CIP or AT+CIP? +CIP:<ip>  OK	AT+CIP +CIP:10.1.167.22  OK
parameter		
ip	localIP address	

### 4.2.8 AT+CREGQuery network registration status

Function	illustrate	Examples and Remarks
query command	AT+CREG or AT+CREG? +CREG:<creg>  OK	AT+CREG +CREG:1  OK
parameter		
<b>creg</b>	network registration status 0: not registered 1: Registered	

### 4.2.9 AT+LBSQuery cell base station information

Function	illustrate	Examples and Remarks
query command	AT+LBSOr AT+LBS? +LBS:<LAC>,<CID>  OK	AT+LBS +LBS:333e,3357906  OK
parameter		
<b>LAC</b>	location area ID	
<b>CID</b>	Cell ID	

### 4.2.10 AT+CCLKquery/set time

Function	illustrate	Examples and Remarks
query command	AT+CCLK or AT+CCLK? +CCLK:<data>,<time>  OK	AT+CCLK? +CCLK:2022/06/19,20:05:19  OK
set command	AT+CCLK=<data>,<time>  OK	AT+CCLK=2022/06/19,20:05:19  OK
parameter		
<b>data</b>	date	
<b>time</b>	time	

### 4.2.11 AT+RUNSTQuery the running status of the module

Function	illustrate	Examples and Remarks
query command	AT+RUNST or AT+RUNST? +RUNST: <status>  OK	AT+RUNST? +RUNST:FS@CREG READY  OK
parameter		

<b>status</b>	For the current status of the module, please refer to the2 chapters
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## 4.3 UART Serial parameters

### 4.3.1 AT+UARTQuery/set serial port parameters

Function	illustrate	Examples and Remarks
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test command	AT+UART=? +UART:<baud>,<data>,<stop>,<parity>,<flow>  OK	AT+UART=? +UART:<300~921600>,<7,8>,<1,2>,<NONE,ODD,EVEN>,<NONE>  OK
query command	AT+UART or AT+UART? +UART:<baud>,<data>,<stop>,<parity>,<flow>  OK	AT+UART? +UART:115200,8,1,NONE,NONE  OK
set command	AT+UART=<baud>,<data>,<stop>,<parity>,<flow>  OK	AT+UART=115200,8,1,NONE,NONE  OK
parameter		
<b>baud</b>	baud rate 300,600,1200,2400,4800,9600,115200,230600,460800,921600	Default: 115200
<b>data</b>	data bit 7: 7 data bits 8: 8 data bits	Default: 8
<b>parity</b>	Check mode NONE: No check ODD: Odd check EVEN: even test	Defaults:NONE
<b>flow</b>	Flow Control NONE: no flow control	Defaults:NONE

### 4.3.2 AT+UARTFL Query/set the package length of the serial port

Function	illustrate	Examples and Remarks
test command	AT+UARTFL=? +UARTFL:<length>  OK	AT+UARTFL=? +UARTFL:<0~4096>  OK
query command	AT+UARTFL or AT+UARTFL? +UART:<length>  OK	AT+UARTFL? +UARTFL:0  OK
set command	AT+UARTFL=<len>  OK	AT+UARTFL=1024  OK



d		
parameter		
length	Packing length 5~4096: Packing length	Default: 4096

### 4.3.3 AT+UARTFTQuery/set serial port packing time

Function	illustrate	Examples and Remarks
test command	AT+UARTFT=? +UARTFT:<time>  OK	AT+UARTFT=? +UARTFT:<0~500(ms)>  OK
query command	AT+UARTFT or AT+UARTFT? +UARTFT:<time>  OK	AT+UARTFT? +UARTFT:30  OK
set command	AT+UARTFT=<time>  OK	AT+UARTFT=30  OK
parameter		
<b>time</b>	packing time 0: Do not enable the idle packing function 1~500: serial port idle packing time, range1~500(ms)	Default: 30

## 4.4 SOCKET parameter

### 4.4.1 AT+SOCK Query/set SOCKET parameters

Function	illustrate	Examples and Remarks
test command	AT+SOCK=? +SOCK:<protocol>,<address>,<port>  OK	AT+SOCK=? +SOCK:<TCP,UDP>,<1~100bytes>,<1~65535>  OK
query command	AT+SOCK or AT+SOCK? +SOCK:<protocol>,<address>,<port>  OK	AT+SOCK? +SOCK:TCP,,5000  OK
set	AT+SOCK=<protocol>,<address>,<port>	AT+SOCK=TCP5000  OK

<b>command</b>	OK	
<b>parameter</b>		
<b>protocol</b>	letter of agreement TCP: TCP protocol UDP: UDP protocol	Defaults:TCP
<b>address</b>	Destination address, support domain name, range: 1~100 bytes	Defaults:

<b>port</b>	Destination port, range:1~65535	
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### 4.4.2 AT+SOCKSSL Query/set SOCKET SSL enable

Function	illustrate	Examples and Remarks
test command	AT+SOCKSSL=? +SOCKSSL:<status>  OK	AT+SOCKSSL=? +SOCKSSL:<ON,OFF>  OK
query command	AT+SOCKSSL or AT+SOCKSSL? +SOCKSSL:<status>  OK	AT+SOCKSSL? +SOCKSSL: ON  OK
set command	AT+SOCKSSL=<status>  OK	AT+SOCKSSL=ON  OK
parameter		
<b>status</b>	SOCKET SSL enabled status ON: Enable OFF: Disable	Default value: ON

### 4.4.3 AT+SOCKEN Query/set SOCKET enable

Function	illustrate	Examples and Remarks
test command	AT+SOCKEN=? +SOCKEN:<status>  OK	AT+SOCKEN=? +SOCKEN:<ON,OFF>  OK
query command	AT+SOCKEN or AT+SOCKEN? +SOCKEN:<status>  OK	AT+SOCKEN? +SOCKEN:ON  OK
set command	AT+SOCKEN=<status>  OK	AT+SOCKEN=ON  OK

parameter		
status	SOCKET enable state ON: Enable OFF: Disable	Default value: ON

#### 4.4.4 AT+SOCKLTK InquireSOCKETConnection Status

Function	illustrate	Examples and Remarks
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test command	/	/
query command	AT+SOCKLK or AT+SOCKLK? +SOCKLK:<status>  OK	AT+SOCKLK? +SOCKLK: Connected  OK
set command	/	/
parameter		
status	SOCKET connection status Connected: connected Disconnected: not connected	

#### 4.4.5 AT+SOCKSLQuery/set SOCKET connection type

Function	illustrate	Examples and Remarks
test command	AT+SOCKSL=? +SOCKSL:<status>  OK	AT+SOCKSL=? +SOCKSL:<LONG,SHORT>  OK
query command	AT+SOCKSL or AT+SOCKSL? +SOCKSL:<status>  OK	AT+SOCKSL? +SOCKSL:LONG  OK
set command	AT+SOCKSL=<status>  OK	AT+SOCKSL=LONG  OK
parameter		
status	SOCKET connection method LONG: long connection SHORT: short connection	Defaults:long

#### 4.4.6 AT+KEEPALIVE Query/set the Keep Alive parameter of SOCKET

Function	Illustrate	Examples and Remarks
test command	AT+KEEPALIVE=? +KEEPALIVE:<status>,<idle>,<interval>,<count>  OK	AT+KEEPALIVE=? +KEEPALIVE:<ON,OFF>,<1~65535(s)>,<1~100(s)>,<1~10>  OK
query command	AT+KEEPALIVE or AT+KEEPALIVE? +KEEPALIVE:<status>,<idle>,<interval>,<count>  OK	AT+KEEPALIVE? +KEEPALIVE:ON,60,15,3  OK
set command	AT+KEEPALIVE=<status>,<idle>,<interval>,<count>	AT+KEEPALIVE=ON,60,15,3

	OK	OK
parameter		
status	SOCKET's Keep Alive enable status ON: Enable OFF: Disable	Defaults: ON
idle	Heartbeat period, range: 1~65535(s)	Default: 60
interval	retransmission interval, range: 1~100(s)	Default: 15
count	Number of retries, range: 1~10	Default: 3

#### 4.4.7 AT+SHORT™ Query/Set SOCKET short connection timeout

Function	illustrate	Examples and Remarks
test command	AT+SHORTTM=? +SHORTTM:<time>  OK	AT+SHORTTM=? +SHORTTM:<1~65535(s)>  OK
query command	AT+SHORT™Or AT+SHORTTM? +SHORTTM:<time>  OK	AT+SHORTTM? +SHORTTM:10  OK
set command	AT+SHORTTM=<time>  OK	AT+SHORTTM=10  OK
parameter		
time	SOCKET short connection timeout, range: 1~65535s	Default: 10s

#### 4.4.8 AT+SOCKRSNUM Query/set the maximum number of reconnections for SOCKET

Function	illustrate	Examples and Remarks
test command	AT+SOCKRSNUM=? +SOCKRSNUM:<number>  OK	AT+SOCKRSNUM=? +SOCKRSNUM:<1~65535>  OK
	AT+SOCKRSNUM or AT+SOCKRSNUM? +SOCKRSNUM:<number>	AT+SOCKRSNUM? +SOCKRSNUM:60



query command	OK	OK
set command	AT+SOCKRSNUM=<number> OK	AT+SOCKRSNUM=60 OK
parameter		
<b>number</b>	Maximum reconnection times of SOCKET connection, range: 1~65535	Default: 60

### 4.4.9 AT+SOCKRSTIM Query/Set SOCKET reconnection interval

Function	illustrate	Examples and Remarks
test command	AT+SOCKRSTIM=? +SOCKRSTIM:<time>  OK	AT+SOCKRSTIM=? +SOCKRSTIM:<10~65535(s)>  OK
query command	AT+SOCKRSTIMor AT+SOCKRSTIM? +SOCKRSTIM:<time>  OK	AT+SOCKRSTIM? +SOCKRSTIM:10  OK
set command	AT+SOCKRSTIM=<time>  OK	AT+SOCKRSTIM=10  OK
parameter		
<b>number</b>	SOCKET connection reconnection time interval, range: 10~65535s	Default: 10s

### 4.4.10 AT+REGEN Query/set SOCKET registration package enable

Function	illustrate	Examples and Remarks
test command	AT+REGEN=? +REGEN:<status>  OK	AT+REGEN=? +REGEN:<ON,OFF>  OK
query command	AT+REGEN or AT+REGEN? +REGEN:<status>  OK	AT+REGEN? +REGEN:ON  OK
set command	AT+REGEN=<status>  OK	AT+REGEN=ON  OK
parameter		
<b>status</b>	SOCKET registration package enable status ON: Enable	

	OFF: Disable	Defaults:OFF
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### 4.4.11 AT+REGTP Query/Set SOCKET Registry Package Content Type

Function	illustrate	Examples and Remarks
test command	AT+REGTP=? +REGTP:<type>  OK	AT+REGTP=? +REGTP:<USER,IMEI,ICCID,SN>  OK
query command	AT+REGTP or AT+REGTP? +REGTP:<type>  OK	AT+REGTP? +REGTP:IMEI  OK
set command	AT+REGTP=<type>  OK	AT+REGTP=IMEI  OK
parameter		
type	SOCKET registration package data type USER: custom data IMEI: IMEI code ICCID: ICCID code SN: SN code	Default: IMEI

### 4.4.12 AT+REGDT Query/Set SOCKET Registration package custom registration information

Function	illustrate	Examples and Remarks
test command	AT+REGDT=? +REGDT:<format>,<data>  OK	AT+REGDT=? +REGDT:<ASCII,HEX>,<1~256bytes>  OK
query command	AT+REGDT or AT+REGDT? +REGDT:<format>,<data>  OK	AT+REGDT? +REGDT:ASCII,freestrong  OK
set command	AT+REGDT=<format>,<data>  OK	AT+REGDT=ASCII,freestrong  OK
parameter		

<b>er</b>		
<b>format</b>	SOCKET custom registration package data format ASCII: ASCII code HEX: hexadecimal	Defaults:ASCII
<b>data</b>	SOCKET custom registration package data, range: 1~256 bytes	Defaults:freestrong

### 4.4.13 AT+REGSND Query/Set SOCKET How to send the registration package

Function	illustrate	Examples and Remarks
test command	AT+REGSND=? +REGSND:<type>  OK	AT+REGSND=? +REGSND:<LINK,DATA,LINK&DATA>  OK
query command	AT+REGSND or AT+REGSND? +REGSND:<type>  OK	AT+REGSND? +REGSND:LINK  OK
set command	AT+REGSND=<type>  OK	AT+REGSND=LINK  OK
parameter		
<b>type</b>	SOCKET registration package sending method LINK: link to send registration package DATA: data carry registration package LINK&DATA: supports link sending and data carrying at the same time	Defaults:LINK

### 4.4.14 AT+HEARTEN Query/Set SOCKET Enable heartbeat packet

Function	illustrate	Examples and Remarks
test command	AT+HEARTEN=? +HEARTEN:<status>  OK	AT+HEARTEN=? +HEARTEN:<ON,OFF>  OK
query command	AT+HEARTEN or AT+HEARTEN? +HEARTEN:<status>  OK	AT+HEARTEN? +HEARTEN:ON  OK
set	AT+HEARTEN=<status>	AT+HEARTEN=ON

command	OK	OK
parameter		
status	SOCKET heartbeat packet enable status ON: Enable OFF: Disable	Defaults:OFF

### 4.4.15 AT+HEARTTP Query/Set SOCKET How to send heartbeat packets

Function	illustrate	Examples and Remarks
test command	AT+HEARTTP=? +HEARTTP:<type>  OK	AT+HEARTTP=? +HEARTTP:<NET,COM>  OK
query command	AT+HEARTTP or AT+HEARTTP? +HEARTTP:<type>  OK	AT+HEARTTP? +HEARTTP:NET  OK
set command	AT+HEARTTP=<type>  OK	AT+HEARTTP=NET  OK
parameter		
type	SOCKET heartbeat packet sending method COM: Heartbeat packet is sent to the serial port NET: Heartbeat packets are sent to the network	Defaults:NET

### 4.4.16 AT+HEARTDT Query/Set SOCKET Heartbeat packet data

Function	illustrate	Examples and Remarks
test command	AT+HEARTDT=? +HEARTDT:<format>,<data>  OK	AT+HEARTDT=? +HEARTDT:<ASCII,HEX>,<1~256bytes>  OK
query command	AT+HEARTDT or AT+HEARTDT? +HEARTDT:<format>,<data>  OK	AT+HEARTDT? +HEARTDT:ASCII,freestrong  OK
set command	AT+HEARTDT=<format>,<data>  OK	AT+HEARTDT=ASCII,freestrong  OK
parameter		



<b>format</b>	SOCKET custom heartbeat packet data format ASCII: ASCII code HEX: hexadecimal	Defaults:ASCII
<b>data</b>	SOCKET custom heartbeat packet data, range: 1~256 bytes	Defaults:freestrong

### 4.4.17 AT+HEARTTM Query/Set SOCKET Heartbeat packet sending interval

Function	illustrate	Examples and Remarks
test command	AT+HEARTTM=? +HEARTTM:<time>  OK	AT+HEARTTM=? +HEARTTM:<1~65535(s)>  OK
query command	AT+HEARTTM or AT+HEARTTM? +HEARTTM:<time>  OK	AT+HEARTTM? +HEARTTM:30  OK
set command	AT+HEARTTM=<time>  OK	AT+HEARTTM=30  OK
parameter		
<b>time</b>	SOCKET heartbeat packet interval, range: 1~65535s	Default: 30s

### 4.4.18 AT+HEARTSORT Query/Set SOCKET Heartbeat packet data type

Function	illustrate	Examples and Remarks
test command	AT+HEARTSORT=? +HEARTSORT:<type>  OK	AT+HEARTSORT=? +HEARTSORT:<ICCID,IMEI,SN,USER,LBS>  OK
query command	AT+HEARTSORT or AT+HEARTSORT? +HEARTSORT:<type>  OK	AT+HEARTSORT? +HEARTSORT:IMEI  OK
set command	AT+HEARTSORT=<type>  OK	AT+HEARTSORT=IMEI  OK
parameter		

<b>type</b>	SOCKET heartbeat packet data type ICCID: ICCID code IMEI: IMEI code USER: custom dataSN: SN code LBS: base station positioning and time information	Default: IMEI
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## 4.5 MQTT parameter

### 4.5.1 AT+MQTTSV Query/set MQTT server parameters

Function	illustrate	Examples and Remarks
test command	AT+MQTTSV=? +MQTTSV:<address>,<port>  OK	AT+MQTTSV=? +MQTTSV:<1~100bytes>,<1~65535>  OK
query command	AT+MQTTSV or AT+MQTTSV? +MQTTSV:<address>,<port>  OK	AT+MQTTSV? +MQTTSV:;1883  OK
set command	AT+MQTTSV=<address>,<port>  OK	AT+MQTTSV=;1883  OK
parameter		
<b>address</b>	Destination address, support domain name, range: 1~100 bytes	Defaults:
<b>port</b>	Destination port, range:1~65535	Default: 1883

### 4.5.2 AT+MQTTSSL Query/set MQTT SSL enable

Function	illustrate	Examples and Remarks
test command	AT+MQTTSSL=? +MQTTSSL:<status>  OK	AT+MQTTSSL=? +MQTTSSL:<ON,OFF>  OK
query command	AT+MQTTSSL or AT+MQTTSSL? +MQTTSSL:<status>  OK	AT+MQTTSSL? +MQTTSSL:ON  OK
set command	AT+MQTTSSL=<status>  OK	AT+MQTTSSL=ON  OK
parameter		

er		
<b>status</b>	MQTT SSL enabled status ON: Enable OFF: Disable	Default value: ON

### 4.5.3 AT+MQTTCONNQuery/set MQTT server connection parameters

Function	illustrate	Examples and Remarks
test command	AT+MQTTCONN=? +MQTTCONN:<clientid>,<username>,<password>,<keepalive>,<clean> OK	AT+MQTTCONN=? +MQTTCONN:<1~100bytes>,<0~100bytes>,<0~100bytes>,<1~65535(s)>,<0,1> OK
query command	AT+MQTTCONN or AT+MQTTCONN? +MQTTCONN:<clientid>,<username>,<password>,<keepalive>,<clean> OK	AT+MQTTCONN? +MQTTCONN:freestrong,username,password,60,1 OK
set command	AT+MQTTCONN=<clientid>,<username>,<password>,<keepalive>,<clean> OK	AT+MQTTCONN=freestrong,username,password,60,1 OK
parameter		
<b>clientid</b>	Unique identification of client identity, range: 1~100 bytes	Defaults:freestrong
<b>username</b>	Username, range: 0~100 bytes	Default: username
<b>password</b>	Password, range: 0~100 bytes	Default: password
<b>keepalive</b>	Keep alive interval, range:1~65535(s)	Default: 60 seconds
<b>clean</b>	clear session flag 0: save the session 1: Clean up the session	Default: 1

### 4.5.4 AT+MQTTSUBQuery/set MQTT subscription parameters

Function	illustrate	Examples and Remarks
test command	AT+MQTTSUB=? +MQTTSUB:<topic>,<qos>  OK	AT+MQTTSUB=? +MQTTSUB:<0~512bytes>,<0~2>  OK
query command	AT+MQTTSUB or AT+MQTTSUB? +MQTTSUB:<topic>,<qos>  OK	AT+MQTTSUB? +MQTTSUB:freestrong,0  OK
set command	AT+MQTTSUB=<topic>,<qos>  OK	AT+MQTTSUB=freestrong,0  OK
parameter		
<b>topic</b>	Subscribed topic name, range: 0~512 bytes	Defaults:freestrong
<b>qos</b>	Quality of service class for subscribing topics 0: distribute at most once 1: distribute at least once 2: Distribute only once	Default: 0

### 4.5.5 AT+MQTTPUBQuery/set MQTT publishing parameters

Function	illustrate	Examples and Remarks
test command	AT+MQTTPUB=? +MQTTPUB:<topic>,<qos>,<retain>  OK	AT+MQTTPUB=? +MQTTPUB:<0~512bytes>,<0~2>,<0,1>  OK
query command	AT+MQTTPUB or AT+MQTTPUB? +MQTTPUB:<topic>,<qos>,<retain>  OK	AT+MQTTPUB? +MQTTPUB:freestrong,0,0  OK
set command	AT+MQTTPUB=<topic>,<qos>,<retain>  OK	AT+MQTTPUB=freestrong,0,0  OK
parameter		

<b>topic</b>	Published topic name, range: 0~512 bytes	Defaults:freestrong
<b>qos</b>	Quality of service class for publishing topics 0: distribute at most once 1: distribute at least once 2: Distribute only once	Default: 0
<b>retain</b>	message reserved flag 0: do not keep 1: reserved	Default: 0



### 4.5.6 AT+MQTTWLENQuery/Set MQTT will enable

Function	illustrate	Examples and Remarks
test command	AT+MQTTWLEN=? +MQTTWLEN:<status>  OK	AT+MQTTWLEN=? +MQTTWLEN:<ON,OFF>  OK
query command	AT+MQTTWLEN or AT+MQTTWLEN? +MQTTWLEN:<status>  OK	AT+MQTTWLEN? +MQTTWLEN:ON  OK
set command	AT+MQTTWLEN=<status>  OK	AT+MQTTWLEN=ON  OK
parameter		
status	MQTT Will Enable Status ON: Enable OFF: Disable	Defaults:OFF

### 4.5.7 AT+MQTTWLTPQuery/Set MQTT Will Topic

Function	illustrate	Examples and Remarks
test command	AT+MQTTWLTP=? +MQTTWLTP:<topic>  OK	AT+MQTTWLTP=? +MQTTWLTP:<0~512bytes>  OK
query command	AT+MQTTWLTP or AT+MQTTWLTP? +MQTTWLTP:<topic>  OK	AT+MQTTWLTP? +MQTTWLTP:freestrong  OK
set command	AT+MQTTWLTP=<topic>  OK	AT+MQTTWLTP=freestrong  OK
parameter		
topic	MQTT will message topic, range: 0~512 bytes	Defaults:freestrong

## 4.5.8 AT+MQTTWLDTQuery/set MQTT will message

Function	illustrate	Examples and Remarks
test command	AT+MQTTWLDT=? +MQTTWLDT:<data>  OK	AT+MQTTWLDT=? +MQTTWLDT:<0~256bytes>  OK
query command	AT+MQTTWLDTor AT+MQTTWLDT? +MQTTWLDT:<data>  OK	AT+MQTTWLDT? +MQTTWLDT:freestrong  OK
set command	AT+MQTTWLDT=<data>  OK	AT+MQTTWLDT=freestrong  OK
parameter		
<b>topic</b>	MQTT will message, format is ASCII, range: 0~256 bytes	Defaults:freestrong

## 4.6 HTTP parameter

### 4.6.1 AT+HTPTPQuery/set HTTP request method

Function	illustrate	Examples and Remarks
test command	AT+HTPTP=? +HTPTP:<type>  OK	AT+HTPTP=? +HTPTP:<GET,POST>  OK
query command	AT+HTPTP or AT+HTPTP? +HTPTP:<type>  OK	AT+HTPTP? +HTPTP:GET  OK
set command	AT+HTPTP=<type>  OK	AT+HTPTP=GET  OK
parameter		

<b>type</b>	HTTP request method GET: GET method POST: POST method	Defaults:GET
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## 4.6.2 AT+HTPSSL Query/set HTTP SSL enable

Function	illustrate	Examples and Remarks
test command	AT+HTPSSL=? +HTPSSL:<status>  OK	AT+HTPSSL=? +HTPSSL:<ON,OFF>  OK
query command	AT+HTPSSL or AT+HTPSSL? +HTPSSL:<status>  OK	AT+HTPSSL? +HTPSSL:ON  OK
set command	AT+HTPSSL=<status>  OK	AT+HTPSSL=ON  OK
parameter		
status	HTTP SSL enabled status ON: Enable OFF: Disable	Default value: ON

## 4.6.3 AT+HTPURL Query/set the URL of the HTTP request

Function	illustrate	Examples and Remarks
test command	AT+HTPURL=? +HTPURL:<url>  OK	AT+HTPURL=? +HTPURL:<0~512bytes>  OK
query command	AT+HTPURL or AT+HTPURL? +HTPURL:<url>  OK	AT+HTPURL? +HTPURL:/1.php?  OK
set command	AT+HTPURL=<url>  OK	AT+HTPURL=/1.php?  OK
parameter		
type	The URL of the HTTP request, range: 0~512 bytes	Default: /1.php?

### 4.6.4 AT+HTPHDQuery/set HTTP request header information

Function	illustrate	Examples and Remarks
test command	AT+HTPHD=? +HTPHD:<content>,<accept>  OK	AT+HTPHD=? +HTPHD:<1~100bytes>,<1~100bytes>  OK
query command	AT+HTPHD or AT+HTPHD? +HTPHD:<content>,<accept>  OK	AT+HTPHD? +HTPHD:text/plain,*/  OK
set command	AT+HTPHD=<content>,<accept>  OK	AT+HTPHD=text/plain,*/  OK
parameter		
<b>content</b>	The "Content-Type" tag of the HTTP request header, the range:1~100 words Festival	Default: text/plain
<b>accept</b>	"Accept-Type" of the HTTP request headerLabel, range: 1~100 characters Festival	Defaults:*/

### 4.6.5 AT+HTPSVQuery/set server parameters for HTTP requests

Function	illustrate	Examples and Remarks
test command	AT+HTPSV=? +HTPSV:<address>,<port>  OK	AT+HTPSV=? +HTPSV:<1~100bytes>,<1~65535>  OK
query command	AT+HTPSV or AT+HTPSV? +HTPSV:<address>,<port>  OK	AT+HTPSV? +HTPSV:,80OK
set command	AT+HTPSV=<address>,<port>  OK	AT+HTPSV=,80  OK
parameter		

<b>address</b>	The "Content-Type" tag of the HTTP request header, the range:1~100 words Festival	Defaults:
<b>port</b>	"Accept-Type" of the HTTP request headerLabel, range: 1~100 characters Festival	Default: 80

### 4.6.6 AT+HTPPKQuery/set whether to enable HTTP packet header filtering

Function	illustrate	Examples and Remarks
test command	AT+HTPPK=? +HTPPK:<status>  OK	AT+HTPPK=? +HTPPK:<ON,OFF>  OK
query command	AT+HTPPK or AT+HTPPK? +HTPPK:<status>  OK	AT+HTPPK? +HTPPK:ON  OK
set command	AT+HTPPK=<status>  OK	AT+HTPPK=ON  OK
parameter		
<b>status</b>	Whether to filterHTTP request response header information ON: Open OFF: Close	Default value: ON

### 4.6.7 AT+HTPTIMQuery/set the timeout of HTTP requests

Function	illustrate	Examples and Remarks
test command	AT+HTPTIM=? +HTPTIM:<time>  OK	AT+HTPTIM=? +HTPTIM:<1~65535s>  OK
query command	AT+HTPTIMor AT+HTPTIM? +HTPTIM:<time>  OK	AT+HTPTIM? +HTPTIM:10  OK
set command	AT+HTPTIM=<time>  OK	AT+HTPTIM=10  OK
parameter		

<b>time</b>	Request timeout, range:1~65535(s)	Default: 10
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## 4.7 NTP parameter

### 4.7.1 AT+NTPENQuery/set NTP time synchronization function enable

Function	illustrate	Examples and Remarks
test command	AT+NTPEN=? +NTPEN:<status>  OK	AT+NTPEN=? +NTPEN:<ON,OFF>  OK
query command	AT+NTPEN or AT+NTPEN? +NTPEN:<status>  OK	AT+NTPEN? +NTPEN:OFF  OK
set command	AT+NTPEN=<status>  OK	AT+NTPEN=OFF  OK
parameter		
status	Whether to enable NTP timing function ON: Open OFF: Close	Defaults:OFF

### 4.7.2 AT+NTPSVRQuery/set NTP server parameters

Function	illustrate	Examples and Remarks
test command	AT+NTPSVR=? +NTPSVR: <SVR1>[,<SVR2>,<SVR3>,<SVR4>]  OK	AT+NTPSVR=? +NTPSVR:<1~100bytes>[,<1~100bytes>,<1~100bytes>,<1~100bytes>]  OK
query command	AT+NTPSVR or AT+NTPSVR? +NTPSVR: <SVR1>[,<SVR2>,<SVR3>,<SVR4>]  OK	AT+NTPSVR? +NTPSVR:cn.ntp.org.cn  OK
set command	AT+NTPSVR=<SVR1>[,<SVR2>,<SVR3>,<SVR4>]  OK	AT+NTPSVR=cn.ntp.org.cn  OK
parameter		

er		
SVRx	Server address, support domain name, range: 1~100 bytes, up to 4, separated by ","	Default: cn.ntp.org.cn, cn.pool.ntp.org

### 4.7.3 AT+NTPTMQuery/set the NTP timing period

Function	illustrate	Examples and Remarks
test command	AT+NTPTM=? +NTPTM:<time>  OK	AT+NTPTM=? +NTPTM:<1~65535(m)>  OK
query command	AT+NTPTM or AT+NTPTM? +NTPEN:<time>  OK	AT+NTPTM? +NTPTM:60  OK
set command	AT+NTPTM=<time>  OK	AT+NTPTM=60  OK
parameter		
<b>time</b>	NTP timing cycle, range: 1~65535(m)	Default: 60 minutes

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