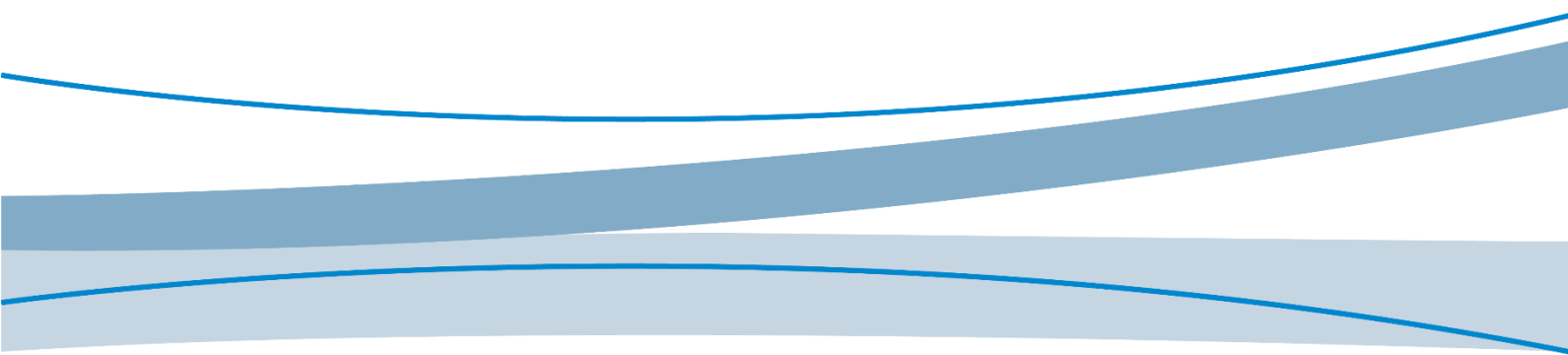




AT Commands User Manual

HTTP

V1.1



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Applicable Model

No.	Applicable Model	Description
1	L61x Series	NA
2	LC61x Series	NA
3	LG61x Series	NA
4	MC61x Series	NA
5	MG61x Series	NA
6	NL66x Series	method in HTTPACT does not support HEAD, please contact support for details
7	MC11x Series	method in HTTPACT does not support HEAD, please contact support for details
8	MG11x Series	method in HTTPACT does not support HEAD, please contact support for details
9	MC10x Series	NA
10	LC11x Series	method in HTTPACT does not support HEAD, please contact support for details
11	MA51x Series	method in HTTPACT does not support HEAD, please contact support for details
12	L71x Series	method in HTTPACT does not support HEAD, please contact support for details
13	LE Series	<p>LE230-CN-1D2,LE270-CN-1D2,LE270-CN-1D21,LE370-CN-1D7 does not support HTTP directives,please contact support for details</p> <p>The HTTPSET RANGE is 0-36000; please contact support for details</p> <p>The HTTPDATA length range is 1-36000; please contact support for details</p> <p>The offset range of HTTPREAD is 0-36000, the length range is 1-36000, the reslength range is 0-36000, please contact technical support for details</p>
14	FG13x Series	The URL range in HTTPSET is not limited, limited by the length of AT parsing, please contact technical support
15	MS18x Series	The URL range in HTTPSET is not limited, limited by the length of AT parsing, please contact technical support

		The HTTPSET RANGE is 0-36000; please contact support for details The HTTPDATA length range is 1-36000; please contact support for details The offset range of HTTPREAD is 0-36000, the length range is 1-36000, the reslength range is 0-36000, please contact technical support for details
16	MC66x Series	NA
17	MG66x Series	NA
18	MC91x Series	NA

Change History

V1.1 (2024-11-12)	Modify the parameter range of the HTTPDATA command in the LE series. Add a note to the HTTPACT command in the NL66x/MC11x/MG11x/LC11x/MA51x/L71x series that the method does not support HEAD.
V1.0 (2024-04-25)	Initial version

1 HTTP

1.1 +HTTPSET, set HTTP or HTTPS parameters

Description

This command is used to set and read the parameters of the current HTTP service.

Format

Type	Command	Response
Setting command	AT+HTTPSET=<"httpParam">,<"httpParamValue">	Response 1: OK
		Response 2: ERROR
Read current settings	AT+HTTPSET?	+HTTPSET: "httpParam","httpParamValue" +HTTPSET: "httpParam","httpParamValue" ... OK
Query command parameter range	AT+HTTPSET=?	+HTTPSET: (<"httpParam">),(<"httpParamValue">) OK

Parameter

Name	Description	Value
URL	HTTP server address	Type: string String length: 0-255 The value must be one of the following: HTTP http://host:port/path http://host/path:port Host: host name or host address of HTTP or HTTPS Path: file path for HTTP or HTTPS request Port: HTTP or HTTPS port, optional. HTTP is 80 and HTTPS is 443 by default. The format http://host:port/path:port can also be compatible and supported. In this case, the port number is the port following the host.
UAGENT	User-Agent value	Type: string The Agent parameters set by the user cannot

Name	Description	Value
		be set.
ACCEPT	Accept value	Type: string The Accept parameters set by the user cannot be set.
CONTYPE	Content-Type value	Type: string The Content-Type parameters set by the user cannot be set.
RESPONSEHEADER	Response header	Type: string The response header set by the user may not be set, and the default value is 0, which is used to indicate whether the HTTP header information is displayed in the AT+HTTPREAD output.
MODE	Setting read mode	0: Default value 1: The received data will be sent to the UART after the connection is established Continuous data can be read by executing AT+HTTPREAD until the end of reception.
REDIR	User set redirection value	0: This value cannot be set, the default value is 0. 1: The block receives a return code such as 3XX or 500 from the server and will jump automatically.
RANGE	Content-Range value	Type: string Range: 0-360000 Each time it is used, it needs to be input according to the protocol standard, for example, "byte =0-12". 206 will be returned when it is successful, and the record of the previous time will be overwritten. This value is not valid for POST.
IPV6	Connection type	Type: string 0: The address type of the connection is IPV4. 1: The address type of the connection is IPV6.



The length of URL strings varies across different platforms, please consult technical support for specific discrepancies.

The configuration item for IPV6 connection types is not supported on certain platforms, please consult technical support for specific discrepancies.

Characteristic

Require SIM Card Normal	Yes	Require Network Registration	Yes
Require Data Connection	Yes	Async or Sync Command	Sync command
Require Restart to Take Effect	No	Require Data Store at Power Down	No
Max Response Duration (ms)	1000	Max Result Returning Duration (ms)	1000

Example

AT+HTTPSET=?

```
+HTTPSET: (<"httpParam">),(<"httpParamValue">)
```

```
OK
```

AT+HTTPSET?

```
+HTTPSET: "URL", ""
```

```
+HTTPSET: "UAGENT", ""
```

```
+HTTPSET: "ACCEPT", "/"
```

```
+HTTPSET: "RANGE", "
```

```
+HTTPSET: "RESPONSEHEADER", "0"
```

```
+HTTPSET: "CTYPE", ""
```

```
+HTTPSET: "MODE", "0"
```

```
+HTTPSET: "REDIR", "0"
```

```
+HTTPSET: "IPV6", "0"
```

```
OK
```

AT+HTTPSET="IPV6", "1"

```
OK
```

AT+HTTPSET?

```
+HTTPSET: "URL", ""
```

```
+HTTPSET: "UAGENT", ""
```

```
+HTTPSET: "ACCEPT", "/"
```

```
+HTTPSET: "RANGE","  
+HTTPSET: "RESPONSEHEADER","0"  
+HTTPSET: "CONTYPE",""  
+HTTPSET: "MODE","0"  
+HTTPSET: "REDIR","0"  
+HTTPSET: "IPV6","1"  
  
OK  
  
AT+HTTPSET="URL", "http://news.sohu.com/20131010/n387881216.shtml:80"  
  
OK
```

1.2 +HTTPDATA, import data that requires POST into the module

Description

This command is used to import the data that requires POST into the module through the serial port and use it during HTTP POST.

Format

Type	Command	Response
Setting command	AT+HTTPDATA=<length>	Response 1: > OK Response 2: ERROR
Read current settings	AT+HTTPDATA?	OK
Query command parameter range	AT+HTTPDATA=?	+HTTPDATA: (list of supported <length>s) OK

Parameter

Name	Description	Value
length	Length of input data	Type: integer Range: 1 to 64000 When the received length reaches the previously provided value, the module exits the

Name	Description	Value
		receive mode and replies an OK. If the data is not received in the specified time (30s), an ERROR is replied.



The Length range varies according to the storage space of different platforms, please consult technical support for specific discrepancies.

Characteristic

Require SIM Card Normal	Yes	Require Network Registration	Yes
Require Data Connection	Yes	Async or Sync Command	Sync command
Require Restart to Take Effect	No	Require Data Store at Power Down	No
Max Response Duration (ms)	1000	Max Result Returning Duration (ms)	1000

Example

AT+HTTPDATA?

OK

AT+HTTPDATA=?

+HTTPDATA: (1-64000)

OK

AT+HTTPDATA=10

> abcdefghijkl

OK

1.3 +HTTPREAD, read received server data from module

Description

This command is used to read the data received from the server after the HTTP service is completed.

Format

Type	Command	Response
Setting command	AT+HTTPREAD	Response 1:

Type	Command	Response
	(read all data)	OK +HTTPREAD: <reslength> Data Response 2: ERROR
Setting command	AT+HTTPREAD=<offset>, <length> (read partial data)	Response 1: +HTTPREAD: <reslength> Data OK Response 2: ERROR
Read current settings	AT+HTTPREAD?	OK
Query command parameter range	AT+HTTPREAD=?	+HTTPREAD: [<offset>, <length>] OK

Parameter

Name	Description	Value
offset	Offset of received data	Range: 0 to 360000
length	Length of read data	Range: 1 to 360000
reslength	Length of data actually read	Range: 0 to 360000



The value ranges of offset, Length, and reslength vary according to the storage space of different platforms, please consult technical support for specific discrepancies.

Characteristic

Require SIM Card Normal	Yes	Require Network Registration	Yes
Require Data Connection	Yes	Async or Sync Command	Sync command
Require Restart to Take Effect	No	Require Data Store at Power Down	No
Max Response Duration (ms)	1000	Max Result Returning Duration (ms)	1000

Example

AT+HTTPREAD=?

```
+HTTPREAD: [(0-360000),(1-360000)]
```

```
OK
```

```
AT+HTTPREAD=0,214
```

```
+HTTPREAD: 214
```

```
HTTP/1.1 200 OK
```

```
Date: Thu, 29 Jul 2021 06:07:29 GMT
```

```
Server: Apache/2.4.41 (Win64) OpenSSL/1.0.2s
```

```
Last-Modified: Fri, 10 May 2019 09:56:07 GMT
```

```
ETag: "2800-58885935cf8f8"
```

```
Accept-Ranges: bytes
```

```
Content-Length: 10
```

```
OK
```

1.4 +HTTTPACT, enable HTTP or HTTPS service

Description

This command is used to enable HTTP service (GET or POST).

Format

Type	Command	Response
Setting command	AT+HTTTPACT=<mode>[,<tim ernum>]	Response 1: OK +HTTP:<status> +HTTTPRES: <method>,<reply>,<length> Response 2: ERROR
Read current settings	AT+HTTTPACT?	OK
Query command parameter range	AT+HTTTPACT=?	+HTTTPACT: (list of supported <method>s) [,list of supported <timernum>s] OK

Parameter

Name	Description	Value
method	Connection mode	0: GET 1: POST 2: HEAD
timernum	Timeout period, which takes effect in two phases: the request phase (including tcp connection and http sending request) as an independent timeout period; The response phase is the timeout period of each http response received, and is refreshed after receiving.	Range: 10 to 60s The default value is 15 seconds.
reply	The code value returned by HTTP.	200: OK 404: Not Found More in RFC261
length	The data length obtained from the HTTP server. When MODE of the HTTPSET is set to 0, the data cache mode can be used to cache up to 360000, and the subsequent data is discarded. When MODE is set to 1, continuous reporting is allowed, and the data corresponds to the actual download length, which can exceed 360000.	Range: 0 to 360000
status	Connection status	0: Connection failed 1: Connection succeeded



The length and method range varies according to the storage space of different platforms, please consult technical support for specific discrepancies.

Characteristic

Require SIM Card Normal	Yes	Require Network Registration	Yes
Require Data Connection	Yes	Async or Sync Command	Async command
Require Restart to Take Effect	No	Require Data Store at Power Down	No
Max Response Duration (ms)	1000	Max Result Returning Duration (ms)	60000

Example

AT+HTTPACT?

OK

AT+HTTTPACT=?

+HTTTPACT: (0-1) [, (10-60)]

OK

AT+HTTTPACT=0,15

OK

+HTTP:1

+HTTPRES: 0,200,10543

1.5 +HTTPHEAD, set HTTP or HTTPS head parameters

Description

This command is used to request the head data imported to the module and use it in HTTP GET and POST requests.

Format

Type	Command	Response
Setting command	AT+HTTPHEAD=<length>	Response 1: > OK
		Response 2: ERROR
Read current settings	AT+HTTPHEAD?	Response 1: OK
		Response 2: ERROR
Query command parameter range	AT+HTTPHEAD=?	+HTTPHEAD: (1-5120) OK

Parameter

Name	Description	Value
length	Length of data to be input	Range: 1 byte to 5120 bytes • When using HTTPHEAD, other parameters set

Name	Description	Value
		<p>using HTTPSET are invalid except URL.</p> <ul style="list-style-type: none"> • When the received data length reaches the given length, the module exits from the mode and responds OK. • When the wait time exceeds 30s, the module exits the mode and responds ERROR.

Characteristic

Require SIM Card Normal	Yes	Require Network Registration	Yes
Require Data Connection	Yes	Async or Sync Command	Sync command
Require Restart to Take Effect	No	Require Data Store at Power Down	No
Max Response Duration (ms)	30000	Max Result Returning Duration (ms)	30000

Example

AT+HTTPHEAD?

OK

AT+HTTPHEAD=?

+HTTPHEAD: (1-5120)

OK