# ESP8266 Embedded Wi-Fi Serial Communication Module AT command





Pins		
5v Connect to 5v power		
GND GND		
TX	Connect it to the RX of MCU	LIADT
RX	Connect it to the TX of MCU	UART
G0	NC	

Note: when you powered the module make sure that G0 pin not connected to anything

Please visit the <u>channel</u> to see all update and upgrade

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#### **Commands list**

WICON	WISTA	WIIP	BAUD
HTGET	HTPOST	VERSION	RESET
DEFUALT	CHECKUPDATE	UPDATE	FSREAD
FSREMOVE	FSLIST	FSADD	FSWRITE

All command above should be written with this way:

#### AT+<COMMAND>

all commends are case-sensitive so don't use small case with it,

#### **Command Details**

When you want to deals and comminutes with the module you need to know which commands you should use.

Here are the commands:

1. Test the module.

test the serial connection is Ok

Command	Response	Parameters
AT	OK	None

#### 2. Reset the module.

reboot the module

Command	Response	Parameters
AT+RESET	OK	None

#### 3. Reset setting to default

Command	Response	Parameters
AT+DEFUALT	OK	None

The default data are: SSID and PASSWORD are empty and the baud rate: 9600 bps

## 4. Check if there is an update or note

Command	Response	Parameters
	If not connected to Wi-Fi	
	WIFI NOT CONNECTED	
	If there is an update	
AT+CHECKUPDATE	THERE IS UPDATE AVIALBLE:	None
ATTEMEROTUATE	<version></version>	None
	Else	
	THERE IS NO UPDATE AVIALBLE	

## 5. Update the firmware

Command	Response	Parameters
AT+UPDATE	If not connected to Wi-Fi WIFI NOT CONNECTED If there is an update It will start downloading new firewarm immediately Else THERE IS NO UPDATE AVIALBLE	None

When start updating it will appear the percent of progress, please don't Shutdown the module while updating

#### 6. Wi-Fi Connection

Connect the module to Wi-Fi use the following command as below.

	Response
Read command  AT+WICON?	<ul> <li>- <ssid>,<pass> when Wi-Fi is connected</pass></ssid></li> <li>- NO WIFI CONNECTED when Wi-Fi is not connected</li> </ul>
ATTWICON	Parameters None
	Note

	None
	Response
	OK
	Parameters
	<b>SSID</b> : the name of the Wi-Fi network
	wants to connect.
	<b>PASS</b> : the password of SSID.
Write command AT+WICON= <ssid>, <pass></pass></ssid>	When they left empty it will be disconnected from Wi-Fi network  Note  - It takes several times for connecting When the module is not connecting to the Wi-Fi, it will blink for 0.1 sec - When the module is connecting to the Wi-Fi, it will blink for 2 sec

#### 7. Wi-Fi IP Address

When the module is connected to the Wi-Fi, it has an IP address

	Response
	<ip address=""></ip>
Read Command	Parameters
AT+WIFIP?	None
	Note
	None

## 8. Baud rate Serial communication

	Response
	<baud rate=""></baud>
Read Command	Parameters
AT+BAUD?	None
	Note
	None
	Response
write Command	ОК
AT+BAUD=< NUMBER >	Parameters
	NUMBER

1 for 9600 bps	
2 for 38400 bps	
3 for 115200 bps	
Note	
- Be careful when changing the	
speed because you will not be	
able to communicate with module	
until you change the speed with	
your program	

# 9. Version of firmware

Read Command AT+VERSION?	Response
	ESP8266 ATCOMMAND
	<version></version>
	Parameters
	None
	Note
	None

# 10.GET http request

You can make http request with get method

	Response
Write Command AT+HTGET= <url></url>	<http code="">, <http response=""></http></http>
	Parameters
	<b>URL:</b> the site or URL you want to make
	http request for
	Note
	- To use this command, you have to
	connect to Wi-Fi which has an
	internet access

## 11.POST http request

You can make http request with POST method

	Response
Write Command AT+HTPOST= <url>, <data></data></url>	<http code="">, <http response=""></http></http>
	Parameters
	<b>URL:</b> the site or URL you want to make
	http request for
	<b>DATA</b> : the data you want to send as
	string
	Note
	- To use this command, you have to
	connect to Wi-Fi which has an
	internet access

#### 12. List the files.

There are files in memory as SPIFFS or LittleFS.

	Response
Read Command AT+FSLIST?	if there any file: <name file="">, <size byte="" in=""></size></name>
	else:
	NO FILE EXIST
	Parameters
	None
	Note
	- You will get the sequence of
	response depend on count of
	exists files

# 13. Read data in files

	Response
Write Command AT+FSREAD= <file name=""></file>	If the file is existing you will get
	< file content>
	Else YOU WILL GET
	ERROR NOT FOUND
	Parameters
	FILE NAME: full name of file with
	extension
	Note

None
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#### 14. Write data into files

Write data into files	
	Response
	ОК
	Parameters
	FILE NAME: full name of file with
	extension
	FILE CONETNET: the content of file
Write Command	you want to be saved
AT+FSWRITE= <file name="">, <file< th=""><td>Note</td></file<></file>	Note
CONETNET>	<ul> <li>In writing method if the file doesn't exist, it will create the file and store the data</li> <li>In writing method if the file exists, it will overwrite the data so the</li> </ul>
	old data will be deleted and will be replaced with the new <b><file< b=""> <b>CONTENT&gt;</b></file<></b>

## 15.add data into files

	Response
Write Command AT+FSADD= <file name="">, <file conetnet=""></file></file>	Parameters  FILE NAME: full name of file with extension  FILE CONETNET: the content of file you want to be saved  Note  - In adding method if the file doesn't exist, it will create the file and store the data  - In adding method if the file is exist it will append the data so the old data won't be deleted and will be replaced with the new <file content=""></file>

# 16.remove files

remove mes	
	Response
	If file exists
	ОК
Write Command AT+FSREMOVE= <file name=""></file>	else
	ERROR NOT FOUND
	Parameters
	FILE NAME: full name of file with
	extension
	- if you pass keyword <b>ALL</b> it will
	delete all the files exist in the
	memory
	Note
	<ul> <li>In adding method if the file</li> </ul>
	doesn't exist, it will create the file
	and store the data
	<ul> <li>In adding method if the file exists</li> </ul>
	it will append the data so the old
	data won't be deleted and will be
	replaced with the new <file< td=""></file<>
	CONTENT>