

## ESP8266 AT Command Set

<b>Function</b>	<b>AT Command</b>	<b>Response</b>
Working	AT	OK
Restart	AT+RST	OK [System Ready, Vendor:www.ai-thinker.com]
Firmware version	AT+GMR	AT+GMR 0018000902 OK
List Access Points	AT+CWLAP	AT+CWLAP +CWLAP:(4,"RocheFortSurLac",-38,"70:62:b8:6f:6d:58",1) +CWLAP:(4,"LiliPad2.4",-83,"f8:7b:8c:1e:7c:6d",1) OK
Join Access Point	AT+CWJAP? AT+CWJAP="SSID","Password"	Query AT+CWJAP? +CWJAP:"RocheFortSurLac" OK
Quit Access Point	AT+CWQAP=? AT+CWQAP	Query OK
Get IP Address	AT+CIFSR	AT+CIFSR 192.168.0.105 OK
Set Parameters of Access Point	AT+ CWSAP? AT+ CWSAP= <ssid>,<pwd>,<chl>, <ecn>	Query ssid, pwd chl = channel, ecn = encryption
WiFi Mode	AT+CWMODE? AT+CWMODE=1 AT+CWMODE=2 AT+CWMODE=3	Query STA AP BOTH
Set up TCP or UDP connection	AT+CIPSTART=? (CIPMUX=0) AT+CIPSTART = <type>,<addr>,<port> (CIPMUX=1) AT+CIPSTART= <id><type>,<addr>, <port>	Query id = 0-4, type = TCP/UDP, addr = IP address, port= port
TCP/UDP Connections	AT+ CIPMUX? AT+ CIPMUX=0 AT+ CIPMUX=1	Query Single Multiple
Check join devices' IP	AT+CWLIF	
TCP/IP Connection Status	AT+CIPSTATUS	AT+CIPSTATUS? no this fun
Send TCP/IP data	(CIPMUX=0) AT+CIPSEND=<length>; (CIPMUX=1) AT+CIPSEND= <id>,<length>	
Close TCP / UDP connection	AT+CIPCLOSE=<id> or AT+CIPCLOSE	
Set as server	AT+ CIPSERVER= <mode>[,<port>]	mode 0 to close server mode; mode 1 to open; port = port
Set the server timeout	AT+CIPSTO? AT+CIPSTO=<time>	Query <time>0~28800 in seconds
Baud Rate*	AT+CIOBAUD? Supported: 9600, 19200, 38400, 74880, 115200, 230400, 460800, 921600	Query AT+CIOBAUD? +CIOBAUD:9600 OK
Check IP address	AT+CIFSR	AT+CIFSR 192.168.0.106 OK
Firmware Upgrade (from Cloud)	AT+CIUPDATE	1. +CIPUPDATE:1 found server 2. +CIPUPDATE:2 connect server 3. +CIPUPDATE:3 got edition 4. +CIPUPDATE:4 start update
Received data	+IPD	(CIPMUX=0): + IPD, <len>; (CIPMUX=1): + IPD, <id>, <len>; <data>
Watchdog Enable*	AT+CSYSWDTENABLE	Watchdog, auto restart when program errors occur: enable
Watchdog Disable*	AT+CSYSWDTDISABLE	Watchdog, auto restart when program errors occur: disable

\* New in V0.9.2.2 (from <http://www.electrodragon.com/w/Wi07c>)