## **ESP8266 AT Command Set**

Function	AT Command	Response
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	AT+ CWSAP?	Query
Access Point	AT+ CWSAP= "ssid", "pwd", chl, ecn	ssid, pwd ,chl = channel, ecn = encryption-> 0 <open>,1<wep>,2<wpa>,3<wpa2>,4<wpa_wpa2></wpa_wpa2></wpa2></wpa></wep></open>
WiFi Mode	AT+CWMODE? AT+CWMODE=1 AT+CWMODE=2 AT+CWMODE=3	Query STA AP BOTH
Set up TCP or UDP	AT+CIPSTART=?	Query
connection	(CIPMUX=0) AT+CIPSTART = <type>,<addr>,<port> (CIPMUX=1) AT+CIPSTART= <id><type>,<addr>, <port></port></addr></type></id></port></addr></type>	id = 0-4, type = TCP/UDP, addr = IP address, port= port mux set to 1 to setup server
TCP/UDP	AT+ CIPMUX?	Query
Connections	AT+ CIPMUX=0	Single
	AT+ CIPMUX=1	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></length></id></length>	
Close TCP / UDP connection	AT+CIPCLOSE= <id> or AT+CIPCLOSE</id>	
Set as server	AT+ CIPSERVER= < mode>[, <port>]</port>	mode 0 to close server mode; mode 1 to open; port = port
Set the server	AT+CIPSTO?	Query
timeout	AT+CIPSTO= <time></time>	<time>0~28800 in seconds</time>
Baud Rate*	AT+CIOBAUD? Supported: 9600, 19200, 38400, 74880, 115200, 230400, 460800, 921600	Query AT+ClOBAUD? +ClOBAUD:9600 OK
Check IP address	AT+CIFSR	AT+CIFSR 192.168.0.106 OK
Firmware Upgrade (from Cloud)	AT+CIUPDATE	<ol> <li>+CIPUPDATE:1 found server</li> <li>+CIPUPDATE:2 connect server</li> <li>+CIPUPDATE:3 got edition</li> <li>+CIPUPDATE:4 start update</li> </ol>
Received data	+IPD	(CIPMUX=0): + IPD, <len>: (CIPMUX=1): + IPD, <id>&gt;, <len>: <data></data></len></id></len>
Watchdog Enable*	AT+CSYSWDTENABLE	Watchdog, auto restart when program errors occur: enable
Watchdog Disable*	AT+CSYSWDTDISABLE	Watchdog, auto restart when program errors occur: disable

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