

Commands	Description	Type	Set/Execute	Inquiry	test	Parameters and Examples
<i>AT+CWMODE</i>	wifi mode	wifi	<i>AT+CWMODE=<mode></i>	AT+CWMODE?	AT+CWMODE=?	1= STA, 2= AP, 3=both, STA is the default mode of router, AP is a normal mode for devices
<i>AT+CIPMODE</i>	set data transmission mode	TCP/IP	<i>AT+CIPMODE=<mode></i>	AT+CIPSEND?		0 not data mode, 1 data mode; return "Link is builded"
<i>AT+ CWSAP</i>	set the parameters of AP	wifi	<i>AT+ CWSAP=<ssid>,<pwd>,<chl>,<ecn></i>	AT+ CWSAP?		ssid, pwd, chl = channel, ecn = encryption; eg. Connect to your router: AT+CWJAP="alselectro","helloworld"; and check if connected: AT+CWJAP?
<i>AT+CWJAP</i>	join the AP	wifi	<i>AT+ CWJAP=<ssid>,< pwd ></i>	AT+ CWJAP?	-	ssid = ssid, pwd = wifi password
<i>AT+ CIPMUX</i>	set mutiple connection	TCP/IP	<i>AT+ CIPMUX=<mode></i>	AT+ CIPMUX?		0 for single connection 1 for multiple connection
<i>AT+CWQAP</i>	quit the AP	wifi	<i>AT+CWQAP</i>	-	AT+CWQAP=?	
<i>AT+CIPSTART</i>	set up TCP or UDP connection	TCP/IP	1)single connection (+CIPMUX=0) <i>AT+CIPSTART=<type>,<addr>,<port>;</i> 2) multiple	-	AT+CIPSTART=?	id = 0-4, type = TCP/UDP, addr = IP address, port= port; eg. Connect to another TCP server, set multiple connection first: AT+CIPMUX=1; connect:

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			connection (+CIPMUX=1) AT+CIPSTART= <id><type>,<add r>,<port>			AT+CIPSTART=4,"TCP", X1.X2.X3.X4",9999
AT	general test	basic	-	-	-	-
AT+RST	restart the module	basic	-	-	-	-
AT+GMR	check firmware version	basic	-	-	-	-
AT+CWLIF	check join devices' IP	wifi	AT+CWLIF	-	-	
AT+CIPSEND	send data	TCP/IP	1)single connection(+CIPMUX=0) AT+CIPSEND=<length>; 2) multiple connection (+CIPMUX=1) AT+CIPSEND=<id>,<length>		AT+CIPSEND=?	eg. send data: AT+CIPSEND=4,15 and then enter the data.
AT+CIPCLOSE	close TCP or UDP connection	TCP/IP	AT+CIPCLOSE=<id> or AT+CIPCLOSE		AT+CIPCLOSE=?	

Commands	Description	Type	Set/Execute	Inquiry	test	Parameters and Examples
<i>AT+CIFSR</i>	Get IP address	TCP/IP	<i>AT+CIFSR</i>			<i>AT+ CIFSR=?</i>
<i>AT+ CIPSTO</i>	Set the server timeout	AT+CIPSTO=<time>	<i>AT+CIPSTO?</i>			<time>0~2880 0 in second
<i>AT+CWLAP</i>	list the AP	wifi	<i>AT+CWLAP</i>			
<i>AT+ CIPSTATUS</i>	get the connection status	TCP/IP	<i>AT+ CIPSTATUS</i>			<id>,<type>,<addr>,<port> ,<tetype>= client or server mode
<i>AT+ CIPSERVER</i>	set as server	TCP/IP	<i>AT+ CIPSERVER=<mode>[,<port>]</i>			mode 0 to close server mode, mode 1 to open; port = port; eg. turn on as a TCP server: <i>AT+CIPSERVER=1,8888</i> , check the self server IP address: <i>AT+CIFSR=?</i>
<i>+IPD</i>	received data					For Single Connection mode(<i>CIPMUX=0</i>): + IPD, <len>: For Multi Connection mode(<i>CIPMUX=1</i>): + IPD, <id>, <len>: <data>

