	A	B	C	D	E	F
1	**Copyright® 2014 EINFODEV, Inc. All rights reserved.**					
2	Command	AT+CIPMUX=0		AT+CIPMUX=1		Manual
3		Console Action	Console Response	Console Action	Console Response	
4	AT	AT<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	AT<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	Attention.
5	AT+RST	AT+RST<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	AT+RST<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	Reset the unit.
6	AT+GMR		<0x0d><0x0a>Ready<0x0d><0x0a>	0	<0x0d><0x0a>Ready<0x0d><0x0a>	Retrieving the firmware version Id.
7	AT+CWMODE=? AT+CWMODE? AT+CWMODE=<mode>	AT+GMR<0x0d><0x0a>	150900	AT+GMR<0x0d><0x0a>	150900	Setting operation mode. 1 - client 2 - Access Point 3 - Client and Access Point The access point functionality does not have DHCP function and it has only minimun functionalities. However, it will assign IP address to client and there is not way to do manual IP, manual DNS and other advance IP functionality. This unit only provide minimal functionality.
8	AT+ CWJAP = <ssid>,< pwd > AT+ CWJAP?	AT+CWJAP="ssid","abcdefgh"<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	AT+CWJAP="ssid","abcdefgh"<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	Joining a network or just an access point.
9	AT+CWLAP	AT+CWLAP<0x0d><0x0a>	<0x0d><0x0a>+CWLAP:(0,"",0)<0x0d><0x0a>CWLAP(4,"ssid",-76)<0x0d><0x0a>CWLAP:(3,"another",-80)<0x0d><0x0a>	AT+CWLAP<0x0d><0x0a>	<0x0d><0x0a>+CWLAP:(0,"",0)<0x0d><0x0a>CWLAP(4,"ssid",-76)<0x0d><0x0a>CWLAP:(3,"another",-80)<0x0d><0x0a>	Retrieving the list of visible network.
10	AT+CWQAP	AT+CWQAP<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	AT+CWQAP<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	Disconnect from current network connection.
11	AT+ CWSAP= <ssid>,<pwd>,<chl>, <ecn> AT+CWSAP?	AT+CWSAP="ESP_9945B5","abcdefgh",11,0<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	Since security is set to 0 (open), the password is not being used.		Seting up access point ssid, password, RF channel and security scheme. The following is the security scheme: 0 - Open. No security. 1 - WEP. 2 - WPA_PSK 3 - WPA2_PSK 4 - WPA_WPA2_PSK
12		AT+CWLIF<0x0d><0x0a>	192.168.4.100<0x0d><0x0a>OK<0x0d><0x0a>	AT+CWLIF<0x0d><0x0a>	192.168.4.100<0x0d><0x0a>OK<0x0d><0x0a>	Retrieving list of assigned IP addresses.
13	AT+ CIPSTATUS	AT+CIPSTATUS<0x0d><0x0a>	STATUS:3<0x0d><0x0a>+CIPSTATUS:0,"TCP", "10.1.10.20", 23,0<0x0d><0x0a>OK<0x0d><0x0a>	AT+CIPSTATUS<0x0d><0x0a>	STATUS:3<0x0d><0x0a>+CIPSTATUS:0,"TCP", "192.168.4.100", 1624,1<0x0d><0x0a>OK<0x0d><0x0a>	Retrieving the current connection as socket client or socket server.
14	AT+CIPSTART=? AT+CIPSTART= <type>,<addr>,<port> (AT+CIPMUX=0) AT+CIPSTART= <id><type>,<addr>,<port> (AT+CIPMUX=1)	AT+CIPSTART="TCP","10.1.10.20",23<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	AT+CIPSTART="TCP","10.1.10.20",23<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	Connecting to socket server (TCP or UDP). Connecting using domain name only working with public domain name such as www.yahoo.com but not the name of the clients of the local router or access points since the DNS servers are built-in into the firmware of the unit as follow: 28.4.192.168,4.255.26.2 and 2.64.31.1. The access point IP address is fixed at 192.168.4.1 and the network mask is fixed at 255.255.255.0. More detailed info can be retrieved by executing 'ipconfig /all' in Windows.

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15	AT+CIPSEND=<length> (AT+CIPMUX=0 & AT+CIPMODE=0) AT+CIPSEND= <id>,<length> (AT+CIPMUX=1 & AT+CIPMODE=0) AT+CIPSEND (AT+CIPMUX=0 & AT+CIPMODE=1)	AT+CIPSEND=1<0x0d><0x0a>	>	AT+CIPSEND=0,1<0x0d><0x0a>	>	Sending by connection channel and by specific length. AT+CIPSEND=<length> is for AT+CIPMODE=0 and AT+CIPMUX=0. AT+CIPSEND=<channel>,<length> is for AT+CIPMODE=0 and AT+CIPMUX=1. Sending data without connection channel and specific length only working when AT+CIPMODE=1 and AT+CIPMUX=0 and sending data using AT+CIPSEND=<length> will reset the unit.
16	AT+CIPCLOSE	AT+CIPCLOSE<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	AT+CIPCLOSE=0<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	Close the socket connection.
17	AT+CIFSR	AT+CIFSR<0x0d><0x0a>	<0x0d><0x0a>10.1.10.26<0x0d><0x0a>	AT+CIFSR<0x0d><0x0a>	<0x0d><0x0a>10.1.10.26<0x0d><0x0a>	Retrieving the assigned IP address when the unit is connecting to a network.
18	AT+ CIPMUX=<mode> AT+ CIPMUX?	AT+CIPMUX=0<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	AT+CIPMUX=1<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	Setting single connection (AT+CIPMUX=0) or multi-channel connection (AT+CIPMUX=1).
19	AT+ CIPSERVER= <mode>[,<port>] (AT+CIPMUX=1)	AT+CIPSERVER=1,23<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	AT+CIPSERVER=1,23<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	Start at the specified port or stop the server. Default port is 333. <mode> is as follow: 0 - close the socket server 1 - open the socket server
20	AT+CIPMODE=<mode> AT+CIPMODE?	AT+CWMODE=1<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	AT+CWMODE=1<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	Setting transparent mode (data from socket client will be send to the serial port as is) or connection channel specific mode (+IPD,<connection channel>,<length>). Data sent from socket client will be broken into multiple unsolicited (+IPD,<connection channel>,<length>) segments. <mode> is as follow: 0 - data received will be send to serial port with +IPD,<connection channel>,<length> format. (AT+CIPMUX=[0,1]) 1 - data received will be send to serial port as data stream. (AT+CIPMUX=0)
21	AT+CIPSTO=<time> AT+CIPSTO?	AT+CIPSTO=28800<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	AT+CIPSTO=28800<0x0d><0x0a>	<0x0d><0x0a>OK<0x0d><0x0a>	Setting the automatic socket client disconnection timeout from 1 to 28800 seconds due to inactivities.
22	Packetized data from the unit		<0x0d><0x0a>+IPD,0,1:A<0x0d><0x0a>OK<0x0d><0x0a>		<0x0d><0x0a>+IPD,0,1:A<0x0d><0x0a>OK<0x0d><0x0a>	Unsolicited data packet (+IPD,<connection channel>,<length>) .