USR-W610 AT Command Set

File version: 1.0.0

Content

1. What is the AT command

AT command is used for controlling module. You can use AT command to configure and query the settings.

2. How to use the AT command

For USR device is in transparent mode normally, you must enter AT command mode at first. Then you can send AT command to configure or query the settings. After you configure the USR device, you should restart the USR device to make the settings take effect. Every time module restart will work in work mode rather AT command mode.

Every AT command must add character carriage return <CR> and line feed <LF>. In Hex, <CR> is 0x0D <LF> is 0x0A.

2.1. How to enter serial AT command mode

Please read this FAQ about entering serial AT command mode.

https://www.usriot.com/support/faq/enter-serial-command-mode.html

3. AT command set

Command	Function
E	Set AT command echo function enable/disable
ENTM	Exit serial AT command mode and enter work mode
NETP	Query/Set Network protocol parameters of socket A
UART	Query/Set serial port parameters
UARTF	Query/Set serial package function enable/disable
UARTFT	Query/Set serial package triggering time
UARTFL	Query/Set serial package triggering length
TMODE	Query/Set W610 work mode
WMODE	Query/Set WIFI mode(AP/STA)
WSKEY	Query/Set encryption parameters in STA mode
WSSSID	Query/Set SSID of connected AP in STA mode
WSLK	Query the connection status in STA mode
WEBU	Query/Set Web Server username and password
WAP	Query/Set AP mode parameters
WAKEY	Query/Set encryption parameters in AP mode
MSLP	Query/Set Sleep mode enable/disable
WSCAN	Search surrounding AP
TCPLK	Query socket A TCP connection connect/disconnected
TCPDIS	Query/Set establish TCP connection enable/disable(Only take effect in TCP Client mode)
WANN	Query/Set network parameters in STA mode(WAN interface parameters)
LANN	Query/Set network parameters in AP mode(LAN interface parameters)
TCPTO	Query/Set timeout re-connection function time of socket A

MAXSK	Query/Set maximum TCP Clients in TCP Server work mode
TCPB	Query/Set Socket B enable/disable
TCPPTB	Query/Set Socket B port number
TCPADDB	Query/Set Socket B server address
TCPTOB	Query/Set timeout re-connection function time of socket B
TCPLKB	Query socket B TCP connection connect/disconnected
EPHY	Set Ethernet interface enable/disable(Other two related commands AT+FEPHY AT+FVEW please see details in 4.29. AT+EPHY)
RELD	Reset W610 to user default setting
FUDLX	Set RS485 enable/disable
MMID	Query/Set module ID
IDFIR	Set sending two bytes ID and two bytes ID inverse code after firstly establishing connection enable/disable
IDEVE	Set sending two bytes ID and two bytes ID inverse code before every data enable/disable
AABR	Set baud rate synchronization function enable/disable
DHCPDEN	Set DHCP Server function of LAN interface enable/disable
HIDESSID	Set hiding SSID of W610 in AP mode enable/disable
DOMAIN	Query/Set Web Server domain name
Z	Restart the W610
MID	Query W610 MID
VER	Query firmware version
H	Query help information of commands
WSQY	Query/Set RSSI threshold(percentage) to switch among three AP in STA mode
HTPMODE	Query/Set HTTP Client mode parameters configuration way(new/old)
HTTPURL	Query/Set HTTP Server address and port in HTTP Client mode old configuration way
HTTPTP	Query/Set HTTP requesting method in HTTP Client mode old configuration way
HTTPPH	Query/Set HTTP header path in HTTP Client mode old configuration way
HTTPCN	Query/Set HTTP header connection in HTTP Client mode old configuration way
HTTPUA	Query/Set HTTP header User-Agent in HTTP Client mode old configuration way
HTPSV	Query/Set HTTP Server address and port in HTTP Client mode new configuration way
HTPTP	Query/Set HTTP requesting method in HTTP Client mode new configuration way
HTPURL	Query/Set HTTP URL in HTTP Client mode new configuration way
HTPHEAD	Query/Set HTTP header in HTTP Client mode new configuration way
REGEN	Query/Set identity packet type
REGTCP	Query/Set identity packet sending method
WTPWR	Query/Set W610 transmitting power
REGCLOUD	Query/Set USR Cloud ID and password
REGUSR	Query/Set user editable identity packet data
TCPDPEN	Query/Set socket distribution function enable/disable

HEARTEN	Query/Set heartbeat packet function enable/disable
HEARTTP	Query/Set sending method of heartbeat packet
HEARTDT	Query/Set heartbeat packet data
HEARTTM	Query/Set sending interval of heartbeat packet
REBOOTEN	Query/Set timing restart function enable/disable
REBOOTT	Query/Set timing restart function time
TIMEOUTEN	Query/Set timeout restart function enable/disable
TIMEOUTT	Query/Set timeout restart function time

4. AT command details

Special Characters		
Character	Note	Hex
<CR>	Carriage Return	0x0D
<LF>	Line Feed	0x0A

4.1. AT+E

Format	
Set	AT+E<CR>
Return	<CR><LF>+ok<CR><LF>

Note: Default setting of echo function is on, user can send above command to close, then send above command again to open.

4.2. AT+ENTM

Format	
Set	AT+ENTM<CR>
Return	<CR><LF>+ok<CR><LF>

4.3. AT+NETP

Parameter	Description	Default Value	Range
<Protocol>	Network protocol of Socket A	TCP	TCP/UDP
<CS>	Network mode of Socket A	SERVER	SERVER/CLIENT
<Port>	Port number of Socket A	8899	Less than 65535
<Address>	Remote Server address of Socket A in client mode	10.10.100.100	0.0.0.0~255.255.255.255
			Domain name
Format			
Query	AT+NETP<CR>		
Return	<CR><LF>+ok=<Protocol>,<CS>,<Port>,<Address><CR><LF>		
Set	AT+NETP=<Protocol>,<CS>,<Port>,<Address><CR>		
Return	<CR><LF>+ok<CR><LF>		

Note: When Socket A work in TCP Server or UDP Server, port can't be 80(HTTP port), 8000(websocket port), 49000(usr-link port).

4.4. AT+UART

Parameter	Description	Default Value	Range
<Baud rate>	Baud rate	57600	300, 600, 1200,1800, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 230400, 345600, 460800
<Data bit>	Data bits	8	5, 6, 7, 8
<Stop bit>	Stop bits	1	1, 2
<Parity>	Parity	NONE	NONE, EVEN, ODD
<Flow Control>	Flow Control	NFC	NFC: No flow control
			FC: Hardware flow control(RTS/CTS)
Format			
Query	AT+UART<CR>		
Return	<CR><LF>+ok=<Baud rate>,<Data bit>,<Stop bit>,<Parity>,<Flow Control><CR><LF>		
Set	AT+UART=<Baud rate>,<Data bit>,<Stop bit>,<Parity>,<Flow Control><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.5. AT+UARTF

Parameter	Description	Range
<Status>	Status of serial package function	enable/disable
Format		
Query	AT+UARTF<CR>	
Return	<CR><LF>+ok=<Status><CR><LF>	
Set	AT+UARTF=<Status><CR>	
Return	<CR><LF>+ok<CR><LF>	

4.6. AT+UARTFT

Parameter	Description	Range
<Time>	Serial package triggering time	100~10000ms
Format		
Query	AT+UARTFT<CR>	
Return	<CR><LF>+ok=<Time><CR><LF>	
Set	AT+UARTFT=<Time><CR>	
Return	<CR><LF>+ok<CR><LF>	

4.7. AT+UARTFL

Parameter	Description	Range
<Length>	Serial package triggering length	16~4096 bytes

Format	
Query	AT+UARTFL<CR>
Return	<CR><LF>+ok=<Length><CR><LF>
Set	AT+UARTFL=<Length><CR>
Return	<CR><LF>+ok<CR><LF>

4.8. AT+TMODE

Parameter	Description	Default Value	Range
<Mode>	W610 data transmission mode	Through	Through: Transparent Transmission mode
			Agreement: Serial port command mode
			Modbus: Modbus TCP<=>Modbus RTU
			Httpdclient: HTTP Client mode
Format			
Query	AT+TMODE<CR>		
Return	<CR><LF>+ok=<Mode><CR><LF>		
Set	AT+TMODE=<Mode><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.9. AT+WMODE

Parameter	Description	Default Value	Range
<Mode>	W610 WiFi mode	AP	AP/STA
Format			
Query	AT+WMODE<CR>		
Return	<CR><LF>+ok=<Mode><CR><LF>		
Set	AT+WMODE=<Mode><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.10. AT+WSKEY

Parameter	Description	Default Value	Range
<AUTH>	Authentication mode	OPEN	OPEN/WPAPSK/WPA2PSK/SHARED
<Encryption>	Encryption algorithm	NONE	NONE: Take effect in <AUTH>=OPEN
			TKIP/AES: Take effect in <AUTH>=WPAPSK or WPA2PSK
			WEP-A/WEP-H: Take effect in <AUTH>=SHARED or OPEN(H means HEX, A means ASCII)
<Password>	Password	No default value	<AUTH>= WPAPSK/WPA2PSK: ASCII format, 8~63 bytes

			<Encryption>=WEP-A: ASCII format, 5 or 13 bytes
			<Encryption>=WEP-H: HEX format, 10 or 26 bytes
Format			
Query	AT+WSKEY<CR>		
Return	<CR><LF>+ok=<AUTH>,<Encryption>,<Password><CR><LF>		
Set	AT+WSKEY=<AUTH>,<Encryption>,<Password><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.11. AT+WSSSID

Parameter	Description	Range
<SSID>	SSID of connected AP in STA mode	Less than 32 bytes
Format		
Query	AT+WSSSID<CR>	
Return	<CR><LF>+ok=<SSID><CR><LF>	
Set	AT+WSSSID=<SSID><CR>	
Return	<CR><LF>+ok<CR><LF>	

4.12. AT+WSLK

Parameter	Description	Range
<Status>	Connection status of W610 in STA mode	Disconnected: No connection with any AP
		SSID of connected AP if connected
		RF Off: Close WIFI
Format		
Query	AT+WSLK<CR>	
Return	<CR><LF>+ok=<Status><CR><LF>	

4.13. AT+WEBU

Parameter	Description	Default Value	Range
<Username>	Username of Web Server	admin	Less than 16 bytes
<Password>	Password of Web Server	admin	Less than 16 bytes
Format			
Query	AT+WEBU<CR>		
Return	<CR><LF>+ok=<Username>,<Password><CR><LF>		
Set	AT+WEBU=<Username>,<Password><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.14. AT+WAP

Parameter	Description	Range
<Mode>	WiFi mode	11B/11BG/11BGN/11G/11N

<SSID>	SSID in AP mode	Less than 32 bytes
<Channel>	WiFi channel	AUTO/CH1~CH11
Format		
Query	AT+WAP<CR>	
Return	<CR><LF>+ok=<Mode>,<SSID>,<Channel><CR><LF>	
Set	AT+WAP=<Mode>,<SSID>,<Channel><CR>	
Return	<CR><LF>+ok<CR><LF>	

4.15. AT+WAKEY

Parameter	Description	Default Value	Range
<AUTH>	Authentication mode	OPEN	OPEN/SHARED/WPAPSK/WPA2PSK
<Encryption>	Encryption algorithm	NONE	NONE: Take effect in <AUTH>=OPEN
			WEP-A/WEP-H: Take effect in <AUTH>=SHARED or OPEN(H means HEX, A means ASCII)
			TKIP/AES/TKIPAES: Take effect in <AUTH>= WPAPSK/WPA2PSK
<Password>	Password	No default value	<AUTH>= WPAPSK/WPA2PSK: ASCII format, 8~63 bytes
			<Encryption>=WEP-A: ASCII format, 5 or 13 bytes
			<Encryption>=WEP-H: HEX format, 10 or 26 bytes
Format			
Query	AT+WAKEY<CR>		
Return	<CR><LF>+ok=<AUTH>,<Encryption>,<Password><CR><LF>		
Set	AT+WAKEY=<AUTH>,<Encryption>,<Password><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.16. AT+MSLP

Parameter	Description	Default Value	Range
<Status>	Status of Sleep mode	on	on: Exit Sleep mode
			off: Enter Sleep mode
Format			
Query	AT+MSLP<CR>		
Return	<CR><LF>+ok=<Status><CR><LF>		
Set	AT+MSLP=<Status><CR>		
Return	<CR><LF>+ok<CR><LF>		

Note: When module enter sleep mode and user send AT+MSLP=ON to exit sleep mode, module will enter AT command mode.

4.17. AT+WSCAN

Parameter	Description
<RSSI>	RSSI of AP that be searched by W610
<SSID>	AP's SSID that be searched by W610
<BSSID>	MAC address of AP that be searched by W610
<Channel>	WiFi network channel
<Encryption>	Encryption algorithm of AP that searched by W610
<Authentication>	Authentication mode of AP that searched by W610
Format	
Query	AT+WSCAN<CR>
Return	<CR><LF>+ok=<LF><CR>RSSI,SSID,BSSID,Channel,Encryption,Authentication<LF><CR><RSSI1><SSID1>,<BSSID1>,<Channel1>,<Encryption1>,<Authentication1><LF><CR><RSSI2><SSID2>,<BSSID2>,<Channel2>,<Encryption2>,<Authentication2><LF><CR>.....<LF><CR><RSSIN><SSIDN>,<BSSIDN>,<ChannelN>,<EncryptionN>,<AuthenticationN><CR><LF>

4.18. AT+TCPLK

Parameter	Description	Range
<Status>	Status of TCP connection of Socket A	on: TCP connection connected
		off: TCP connection disconnected
Format		
Query	AT+TCPLK<CR>	
Return	<CR><LF>+ok=<Status><CR><LF>	

4.19. AT+TCPDIS

Parameter	Description	Default Value	Range
<Status>	Allowing establishing TCP connection in TCP Client mode	on	on: Allow connecting, after setting to on, starting to connect to server immediately
			off: Disallow connecting, after setting to off, disconnecting immediately and not to reconnect
Format			
Query	AT+TCPDIS<CR>		
Return	<CR><LF>+ok=<Status><CR><LF>		
Set	AT+TCPDIS=<Status><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.20. AT+WANN

Parameter	Description	Default Value	Range
<Mode>	How to get IP address in STA mode	DHCP	static/DHCP
<IP address>	IP address in STA mode	0.0.0.0	0.0.0.0~255.255.255.255
<Mask>	Subnet mask in STA mode	0.0.0.0	0.0.0.0~255.255.255.255
<Gateway>	Gateway address in STA mode	0.0.0.0	0.0.0.0~255.255.255.255
Format			
Query	AT+WANN<CR>		
Return	<CR><LF>+ok=<Mode>,<IP address>,<Mask>,<Gateway><CR><LF>		
Set	AT+WANN=<Mode>,<IP address>,<Mask>,<Gateway><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.21. AT+LANN

Parameter	Description	Default Value	Range
<IP address>	IP address of W610 in AP mode	10.10.100.254	0.0.0.0~255.255.255.255
<Mask>	Subnet mask of W610 in AP mode	255.255.255.0	0.0.0.0~255.255.255.255
Format			
Query	AT+LANN<CR>		
Return	<CR><LF>+ok=<IP address>,<Mask><CR><LF>		
Set	AT+LANN=<IP address>,<Mask><CR>		
Return	<CR><LF>+ok<CR><LF>		

Note: WAN interface IP(AT+WANN) and LAN interface IP(AT+LANN) can't in same network segment.

4.22. AT+TCPTO

Parameter	Description	Default Value	Range
<Time>	Timeout re-connection time of socket A	0	0-600s
			0 (Close function)
Format			
Query	AT+TCPTO<CR>		
Return	<CR><LF>+ok=<Time><CR><LF>		
Set	AT+TCPTO=<Time><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.23. AT+MAXSK

Parameter	Description	Default Value	Range
<NUM>	Maximum TCP Clients that W610 support in TCP Server	24	1~24
Format			
Query	AT+MAXSK<CR>		
Return	<CR><LF>+ok=<NUM><CR><LF>		
Set	AT+MAXSK=<NUM><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.24. AT+TCPB

Parameter	Description	Range
<Status>	Status of socket B	on/off
Format		
Query	AT+TCPB<CR>	
Return	<CR><LF>+ok=<Status><CR><LF>	
Set	AT+TCPB=<Status><CR>	
Return	<CR><LF>+ok<CR><LF>	

4.25. AT+TCPPTB

Parameter	Description	Range
<Port>	Port number of Socket B	1~65535
Format		
Query	AT+TCPPTB<CR>	
Return	<CR><LF>+ok=<Port><CR><LF>	
Set	AT+TCPPTB=<Port><CR>	
Return	<CR><LF>+ok<CR><LF>	

4.26. AT+TCPADDB

Parameter	Description	Range
<Address>	Remote server address of socket B	0.0.0.0~255.255.255.255
		Domain name
Format		
Query	AT+TCPADDB<CR>	
Return	<CR><LF>+ok=<Address><CR><LF>	
Set	AT+TCPADDB=<Address><CR>	
Return	<CR><LF>+ok<CR><LF>	

4.27. AT+TCPTOB

Parameter	Description	Default Value	Range
<Time>	Timeout re-connection time of socket B	0	0-600s
			0 (Close function)
Format			
Query	AT+TCPTOB<CR>		
Return	<CR><LF>+ok=<Time><CR><LF>		
Set	AT+TCPTOB=<Time><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.28. AT+TCPLKB

Parameter	Description	Range
<Status>	Status of TCP connection of Socket B	on: TCP connection connected
		off: TCP connection disconnected
Format		
Query	AT+TCPLKB<CR>	
Return	<CR><LF>+ok=<Status><CR><LF>	

4.29. AT+EPHY

Format	
Set	AT+EPHY<CR>
Return	<CR><LF>+ok<CR><LF>

Note: To reduce power consumption, default of Ethernet interface is off. When user sends above AT+EPHY command to open Ethernet interface, the setting won't be saved after restarting(Ethernet interface will disable after restarting). So user can send AT+FEPHY=on to enable Ethernet interface permanently.

User can also use AT+FVEW=disable/enable to set Ethernet interface in LAN interface(disable) or WAN interface(enable). This command will take effect after resetting to default settings.

4.30. AT+RELD

Format	
Set	AT+RELD<CR>
Return	<CR><LF>+ok=rebooting...<CR><LF>

4.31. AT+FUDLX

Parameter	Description	Range
<Status>	Status of RS485 function	on/off
Format		
Set	AT+FUDLX=<Status><CR>	
Return	<CR><LF>+ok<CR><LF>	

Note: Default of RS485 is off and this command will take effect after resetting to default settings.

4.32. AT+MMID

Parameter	Description	Range
<ID>	Module ID	0~65535
Format		
Query	AT+MMID<CR>	
Return	<CR><LF>+ok=<ID><CR><LF>	
Set	AT+MMID=<ID><CR>	
Return	<CR><LF>+ok<CR><LF>	

4.33. AT+IDFIR

Parameter	Description	Default	Range
<Status>	Status of sending two bytes ID and two bytes ID inverse code after firstly establishing connection function	off	on/off
Format			
Query	AT+IDFIR<CR>		
Return	<CR><LF>+ok=<Status><CR><LF>		
Set	AT+IDFIR=<Status><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.34. AT+IDEVE

Parameter	Description	Default	Range
<Status>	Status of sending two bytes ID and two bytes ID inverse code before every data function	off	on/off
Format			
Query	AT+IDEVE<CR>		
Return	<CR><LF>+ok=<Status><CR><LF>		
Set	AT+IDEVE=<Status><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.35. AT+AABR

Parameter	Description	Default	Range
<Status>	Status of baud rate synchronization function	on	on/off
Format			
Query	AT+AABR<CR>		
Return	<CR><LF>+ok=<Status><CR><LF>		
Set	AT+AABR=<Status><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.36. AT+DHCPDEN

Parameter	Description	Default	Range
<Status>	Status of LAN interface DHCP Server function	on	on/off
Format			
Query	AT+DHCPDEN<CR>		
Return	<CR><LF>+ok=<Status><CR><LF>		
Set	AT+DHCPDEN=<Status><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.37. AT+HIDESSID

Parameter	Description	Default	Range
<Status>	Status of hiding SSID of W610 in AP mode	off	on/off
Format			
Query	AT+HIDESSID<CR>		
Return	<CR><LF>+ok=<Status><CR><LF>		
Set	AT+HIDESSID=<Status><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.38. AT+DOMAIN

Parameter	Description
<Name>	Domain name to enter Web Server
Format	
Query	AT+DOMAIN<CR>
Return	<CR><LF>+ok=<Name><CR><LF>
Set	AT+DOMAIN=<Name><CR>
Return	<CR><LF>+ok<CR><LF>

4.39. AT+Z

Format	
Set	AT+Z<CR>
Return	<CR><LF>+ok<CR><LF>

4.40. AT+MID

Parameter	Description
<MID>	Module MID, format: A11-yymmddnnnn. yymmdd means produced date year/month/day. nnnn means production series number
Format	
Query	AT+MID<CR>
Return	<CR><LF>+ok=<MID><CR><LF>

4.41. AT+VER

Parameter	Description
<VER>	Firmware version of the module
Format	
Query	AT+VER<CR>
Return	<CR><LF>+ok=<VER><CR><LF>

4.42. AT+H

Parameter	Description
<Help>	Command help information
Format	
Query	AT+H<CR>
Return	<CR><LF>+ok=<Help><CR><LF>

4.43. AT+WSQY

Parameter	Description	Default Value	Range
<Ret>	RSSI threshold(percentage)	100	0~100. 100: Not to automatically switch AP
Format			
Query	AT+WSQY<CR>		
Return	<CR><LF>+ok=<Ret><CR><LF>		
Set	AT+WSQY=<Ret><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.44. AT+HTPMODE

Parameter	Description	Default Value	Range
<Type>	HTTP Client configuration mode	new	new/old
Format			
Query	AT+HTPMODE<CR>		
Return	<CR><LF>+ok=<Type><CR><LF>		
Set	AT+HTPMODE=<Type><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.45. AT+HTTPURL

Parameter	Description	Range
<Address>	Server address	IP address: 0.0.0.0~255.255.255.255
		Domain name: 1-64 bytes
<Port>	Server port	0-65535
Format		
Query	AT+HTTPURL<CR>	

Return	<CR><LF>+ok=<Address>,<Port><CR><LF>
Set	AT+HTTPURL=<Address>,<Port><CR>
Return	<CR><LF>+ok<CR><LF>

4.46. AT+HTTPTP

Parameter	Description	Default Value	Range
<Method>	HTTP requesting method	GET	GET/PUT/POST
Format			
Query	AT+HTTPTP<CR>		
Return	<CR><LF>+ok=<Method><CR><LF>		
Set	AT+HTTPTP=<Method><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.47. AT+HTTPPH

Parameter	Description	Default Value
<Path>	HTTP header path	/abcd
Format		
Query	AT+HTTPPH<CR>	
Return	<CR><LF>+ok=<Path><CR><LF>	
Set	AT+HTTPPH=<Path><CR>	
Return	<CR><LF>+ok<CR><LF>	

4.48. AT+HTTPCN

Parameter	Description	Default Value
<Connection>	HTTP header connection	keep-alive
Format		
Query	AT+HTTPCN<CR>	
Return	<CR><LF>+ok=<Connection><CR><LF>	
Set	AT+HTTPCN=<Connection><CR>	
Return	<CR><LF>+ok<CR><LF>	

4.49. AT+HTTPUA

Parameter	Description	Default Value
< User-Agent>	HTTP header User-Agent	lwip1.3.2
Format		
Query	AT+HTTPUA<CR>	
Return	<CR><LF>+ok=< User-Agent><CR><LF>	
Set	AT+HTTPUA=< User-Agent><CR>	
Return	<CR><LF>+ok<CR><LF>	

4.50. AT+HTPSV

Parameter	Description	Range
<Address>	Server address	IP address: 0.0.0.0~255.255.255.255
		Domain name: 1-64 bytes
<Port>	Server port	0-65535
Format		
Query	AT+HTPSV<CR>	
Return	<CR><LF>+ok=<Address>,<Port><CR><LF>	
Set	AT+HTPSV=<Address>,<Port><CR>	
Return	<CR><LF>+ok<CR><LF>	

4.51. AT+HTPTP

Parameter	Description	Default Value	Range
<Method>	HTTP request method	GET	GET/PUT/POST
Format			
Query	AT+HTPTP<CR>		
Return	<CR><LF>+ok=<Method><CR><LF>		
Set	AT+HTPTP=<Method><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.52. AT+HTPURL

Parameter	Description	Default Value	Range
<URL>	HTTP URL	/abcd	Length:1~64 bytes
Format			
Query	AT+HTPURL<CR>		
Return	<CR><LF>+ok=<URL><CR><LF>		
Set	AT+HTPURL=<URL><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.53. AT+HTPHEAD

Parameter	Description	Default Value	Range
<Header>	HTTP header data	Content-type:text/html;charset=utf-8(User should use <<CRLF>> to replace carriage return and line feed)	Length: 0~200 bytes
Format			
Query	AT+HTPHEAD<CR>		
Return	<CR><LF>+ok=<Header><CR><LF>		
Set	AT+HTPHEAD=<Header><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.54. AT+REGEN

Parameter	Description	Default Value	Range
<Status>	Status of identity packet	off	id: Use 2 bytes ID code and 2 bytes ID inverse code as identity packet
			mac: Use 6 bytes MAC address as identity packet
			usr: Use user editable identity packet, less than 32 bytes
			cloud: Use USR Cloud ID as identity packet(only support FIRST method)
			off: Disable the identity packet function
Format			
Query	AT+REGEN<CR>		
Return	<CR><LF>+ok=<Status><CR><LF>		
Set	AT+REGEN=<Status><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.55. AT+REGTCP

Parameter	Description	Default Value	Range
<Method>	Identity packet sending method	first	first: Only sending identity packet before first packet after firstly connecting to server
			every: Sending identity packet in every packet.
Format			
Query	AT+REGTCP<CR>		
Return	<CR><LF>+ok=<Method><CR><LF>		
Set	AT+REGTCP=<Method><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.56. AT+WTPWR

Parameter	Description	Default Value	Range
<NUM>	Module transmitting power	100	0~100
Format			
Query	AT+WTPWR<CR>		
Return	<CR><LF>+ok=<NUM><CR><LF>		
Set	AT+WTPWR=<NUM><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.57. AT+REGCLOUD

Parameter	Description	Range
<ID>	USR Cloud ID	Length: 20 bytes
<Password>	USR Cloud password	Length: Less than 8 bytes
Format		
Query	AT+REGCLOUD<CR>	
Return	<C+R><LF>+ok=<ID>,<Password><CR><LF>	
Set	AT+REGCLOUD=<ID>,<Password><CR>	
Return	<CR><LF>+ok<CR><LF>	

4.58. AT+REGUSR

Parameter	Description	Default Value	Range
<Data>	User editable identity packet data	7777772E7573722E636E	Length: Less than 40 bytes, HEX format
Format			
Query	AT+REGUSR<CR>		
Return	<CR><LF>+ok=<Data><CR><LF>		
Set	AT+REGUSR=<Data><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.59. AT+TCPDPEN

Parameter	Description	Default Value	Range
<Status>	Status of socket distribution function	off	on/off
Format			
Query	AT+TCPDPEN<CR>		
Return	<CR><LF>+ok=<Status><CR><LF>		
Set	AT+TCPDPEN=<Status><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.60. AT+HEARTEN

Parameter	Description	Default Value	Range
<Status>	Status of heartbeat packet function	off	on/off
Format			
Query	AT+HEARTEN<CR>		
Return	<CR><LF>+ok=<Status><CR><LF>		
Set	AT+HEARTEN=<Status><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.61. AT+HEARTTP

Parameter	Description	Default Value	Range
<Type>	Sending method of heartbeat packet	NET	NET: Sending to Network Server
			COM: Sending to serial port
Format			
Query	AT+HEARTTP<CR>		
Return	<CR><LF>+ok=<Type><CR><LF>		
Set	AT+HEARTTP=<Type><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.62. AT+HEARTDT

Parameter	Description	Default Value	Range
<Data>	Heartbeat packet data	7777772E7573722E636E	Less than 40 bytes, HEX format
Format			
Query	AT+HEARTDT<CR>		
Return	<CR><LF>+ok=<Data><CR><LF>		
Set	AT+HEARTDT=<Data><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.63. AT+HEARTTM

Parameter	Description	Default Value	Range
<Interval>	Heartbeat packet sending interval	30s	Can be set between 1-65535s. But keep-alive time is 60s, so Heartbeat packet sending interval can only take effect between 1-60s.
Format			
Query	AT+HEARTTM<CR>		
Return	<CR><LF>+ok=<Interval><CR><LF>		
Set	AT+HEARTTM=<Interval><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.64. AT+REBOOTEN

Parameter	Description	Default Value	Range
<Status>	Status of timing restarting function	off	on/off
Format			
Query	AT+REBOOTEN<CR>		
Return	<CR><LF>+ok=<Status><CR><LF>		

Set	AT+REBOOTEN=<Status><CR>
Return	<CR><LF>+ok<CR><LF>

4.65. AT+REBOOTT

Parameter	Description	Default Value	Range
<Time>	Time of timing restarting function	24h	1~720h
Format			
Query	AT+REBOOTT<CR>		
Return	<CR><LF>+ok=<Time><CR><LF>		
Set	AT+REBOOTT=<Time><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.66. AT+TIMEOUTEN

Parameter	Description	Default Value	Range
<Status>	Status of timeout restarting function	off	on/off
Format			
Query	AT+TIMEOUTEN<CR>		
Return	<CR><LF>+ok=<Status><CR><LF>		
Set	AT+TIMEOUTEN=<Status><CR>		
Return	<CR><LF>+ok<CR><LF>		

4.67. AT+TIMEOUTT

Parameter	Description	Default Value	Range
<Time>	Time of timeout restarting function	3600s	60-65535s
Format			
Query	AT+TIMEOUTT<CR>		
Return	<CR><LF>+ok=<Time><CR><LF>		
Set	AT+TIMEOUTT=<Time><CR>		
Return	<CR><LF>+ok<CR><LF>		

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7. Update History

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