

USR-W630 AT Commands

File Version: V1.0.3



Contents

USR-W630 AT Commands.....	1
1. AT Command Setting.....	4
1.1. Serial Port AT Commands.....	4
1.2. Net AT Commands.....	4
1.3. nReady pin signal setting.....	5
1.4. Error Code.....	5
1.5. AT Commands.....	5
1.5.1. AT+E.....	7
1.5.2. AT+ENTM.....	7
1.5.3. AT+NETP.....	7
1.5.4. AT+UART.....	8
1.5.5. AT+UARTF.....	8
1.5.6. AT+UARTFT.....	9
1.5.7. AT+UARTFL.....	9
1.5.8. AT+TMODE.....	9
1.5.9. AT+WMODE.....	9
1.5.10. AT+WSKEY.....	10
1.5.11. AT+WSSID.....	10
1.5.12. AT+WSLK.....	11
1.5.13. AT+WEBU.....	11
1.5.14. AT+WAP.....	11
1.5.15. AT+WAKEY.....	12
1.5.16. AT+MSLP.....	12
1.5.17. AT+WSCAN.....	13
1.5.18. AT+TCPLK.....	13
1.5.19. AT+TCPDIS.....	13
1.5.20. AT+WANN.....	13
1.5.21. AT+LANN.....	14
1.5.22. AT+TCPTO.....	14
1.5.23. AT+MAXSK.....	15
1.5.24. AT+TCPB.....	15
1.5.25. AT+TCPPTB.....	15
1.5.26. AT+TCPADD.....	15
1.5.27. AT+TCPTOB.....	16
1.5.28. AT+TCPLKB.....	16
1.5.29. AT+EPHY.....	16
1.5.30. AT+HTTPSCEN.....	17
1.5.31. AT+AABR.....	17
1.5.32. AT+DHCPDEN.....	17
1.5.33. AT+HIDESSID.....	17
1.5.34. AT+DOMAIN.....	17
1.5.35. AT+RELD.....	18

1.5.36.	AT+Z.....	18
1.5.37.	AT+MID.....	18
1.5.38.	AT+VER.....	18
1.5.39.	AT+H.....	18
1.5.40.	AT+WSQY.....	19
1.5.41.	AT+HTPMODE.....	19
1.5.42.	AT+HTTPURL.....	19
1.5.43.	AT+HTTPPTP.....	20
1.5.44.	AT+HTTPPH.....	20
1.5.45.	AT+HTTPCN.....	20
1.5.46.	AT+HTTPUA.....	20
1.5.47.	AT+HTPSV.....	21
1.5.48.	AT+HTPTP.....	21
1.5.49.	AT+HTPURL.....	21
1.5.50.	AT+HTPHEAD.....	22
1.5.51.	AT+REGEN.....	22
1.5.52.	AT+REGTCP.....	22
1.5.53.	AT+WTPWR.....	22
1.5.54.	AT+REGCLOUD.....	23
1.5.55.	AT+REGUSR.....	23
1.5.56.	AT+TCPDPEN.....	23
1.5.57.	AT+HEARTEN.....	24
1.5.58.	AT+HEARTTP.....	24
1.5.59.	AT+HEARTDT.....	24
1.5.60.	AT+HEARTTM.....	25
1.5.61.	AT+REBOOTEN.....	25
1.5.62.	AT+REBOOTT.....	25
1.5.63.	AT+TIMEOUTEN.....	25
1.5.64.	AT+TIMEOUTT.....	26
1.5.65.	AT+FAPSTA.....	26
1.5.66.	AT+MODBPOLLEN.....	26
1.5.67.	AT+UPDATE.....	26
1.5.68.	AT+MONITOR.....	27
2.	Contact Us.....	28
3.	Disclaimer.....	29
4.	Update History.....	30

1. AT Command Setting

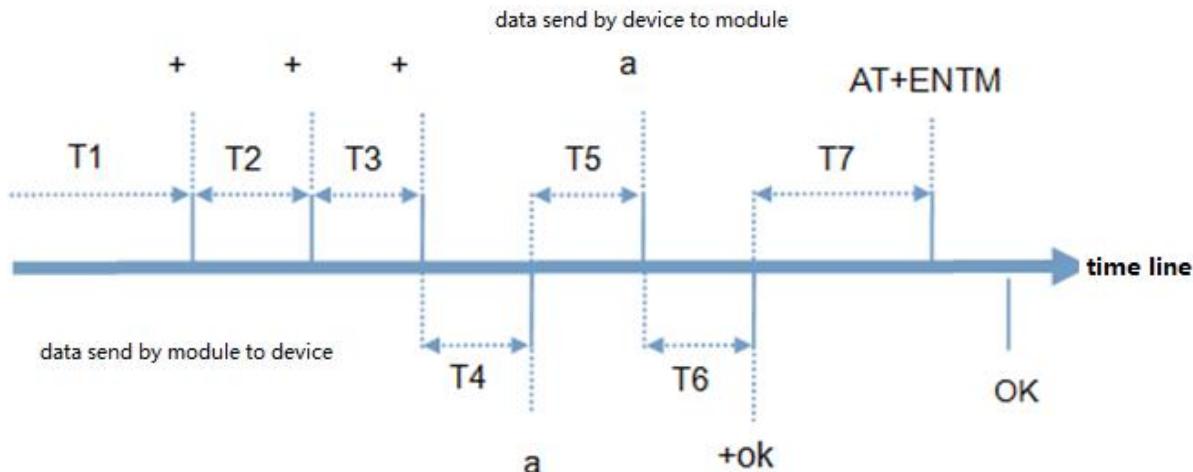


Figure 1 switching instruction mode timing

Time requirements:

T1 > 200ms

T2 < 50ms

T3 < 50ms

T5 < 3S

When switch into AT command mode:

1. The serial port device sends "+++" to the module continuously. When the module receives "+++", it sends an "a" to the device.

No data can be sent in 200ms before sending + + +.

2. When the device receives "a", it must send another "a" to the module within 3 seconds.
3. Module sends the "+ok" to the device after receive "a" and enters the "command mode".
4. After receiving "+ok", the device knows that the module has entered "command mode" and user can send AT command to it.

When quit AT command mode:

1. The serial port sends the instruction "AT+ENTM" to the module.
2. Module sends the "+OK" to the device after receive command and returns to the previous mode.
3. After receiving the "+OK", the device knows that the module has returned to its previous working mode.

1.1. Serial Port AT Commands

Users can set up the WIFI serial port server by using AT command through UART port.

1.2. Net AT Commands

After searching for W630 through LAN search, use AT command to query and set W630 parameters.

1.3. nReady pin signal setting

nReady pin works on level mode by default, users can set it into heartbeat mode by AT commands

AT+FNRDY=beat

Then send AT+RELD to enable this command

Note: AT+RELD won't recovery this function to factory setting.

1.4. Error Code

Error code	Intro
-1	Invalid command format
-2	Invalid command
-3	Invalid operator
-4	Invalid parameter
-5	Unpermitted operation

1.5. AT Commands

Table 8 AT commands

Command	Function
(None)	Empty command
E	Open/close instruction recall
ENTM	Exit command mode
NETP	Query/setup the parameter of net protocol
UART	Query/setup the parameter of serial port
UARTF	Open/close auto framing function
UARTFT	Set / query auto framing trigger time
UARTFL	Set / query auto framing trigger length
TMODE	Set / query data transfer mode (transparent transport mode or protocol mode)
WKMOD	Query / setup work mode
WSKEY	Set / query encryption parameters in WIFI STA mode
WSSID	Set / query AP SSID in WIFI STA mode
WSLK	Query link status in wireless STA mode
WEBU	Set / query landing parameters for WEB pages
WAP	Setting / querying parameters in WIFI AP mode
WAKEY	Set / query encryption parameters in WIFI AP mode
MSLP	Set the module into low power mode, close WIFI
WSCAN	Search AP in STA mode
TCPLK	Query whether the TCPA connection has been established.

TCPDIS	Link / disconnect TCP (valid only at TCP Client)
WANN	Setting / querying WAN settings is valid only in STA mode.
LANN	Setting / querying LAN settings is valid only in AP mode.
TCPTO	Set / query TCP timeout time
MAXSK	Set / query maximum TCP connection number
TCPB	Enabling / disabling TCPB functions
TCPPTB	Set / query the port number of TCPB
TCPADDB	Set / query the server address of TCPB
TCPTOB	Set / query TCPB timeout time
TCPLKB	Query whether the TCPB connection has been established.
EPHY	Turn on / off ETH interface
RELD	Restore factory settings
IDFIR	Turn on / off for the first time to establish the ID function of the connection belt.
IDEVE	Turn on / off each data with ID function
AABR	Turn on / off adaptive baud rate function
DHCPDEN	Turn on / off the DHCP Server function of LAN port.
HIDESSID	Set up / query to hide the SSID of module AP
DOMAIN	Set / query the domain name of the landing module page.
Z	Reboot module
AT+FAPSTA	Enabling or prohibiting AP+STA functions
MID	Query module MID
VER	Query software version
H	Help orders
WSQY	Set / query the threshold value of signal switching for three sets of STA parameters.
HTPMODE	New and old version of HTTP header setup mode switch (HTTPD Client)
HTTPURL	The old version sets / inquires the IP and port of the HTTP server
HTTPTP	Old version set / query HTTP request type
HTTPPH	Old version set / query HTTP protocol header path
HTTPCN	Old version set / query HTTP protocol header Connection
HTTPUA	Old version set / query HTTP protocol header User-Agent
HTPSV	New version / query server address and IP (HTTPD Client)
HTPTP	New version / query request mode (HTTPD Client)
HTPURL	New version / query request path (HTTPD Client)
HTPHEAD	New version / query HTTP header (HTTPD Client)
HTTPSCEN	Set / query HTTPD Client connection mode (long/short)
HTTPSCST	Set / query HTTPD Client short connection timeout time (3-65535s)
REGEN	Setting / querying registration package types
REGTCP	Setting up and querying registration packages
WTPWR	Set module transmit power

REGCLOUD	Set up / query through cloud device serial number and password.
FVER	Set up / query module software version (N-Ver, Z-Ver)
REGUSR	Setting / querying user-defined registration package contents
TCPDPEN	Open / close socket distribution function
HEARTEN	Open / close custom heartbeat package function
HEARTTP	Set / query custom heartbeat packet sending direction
HEARTDT	Set / query custom heartbeat data
HEARTTM	Set / query custom heartbeat packet sending interval
REBOOTEN	Turn on / off timer restart function
REBOOTT	Set / query timed restart time
TIMEOUTEN	Turn on / off timeout restart function
TIMEOUTT	Setup / query timeout restart time
MODBPOllen	Enabling or prohibiting Modbus polling function
MODBPOLLT	Query / set polling interval (50~65535) (MS)
UPDATE	Query and set enabled status of remote upgrade, remote server address, remote server port, reporting interval
MONITOR	Query and set the enabling state and reporting interval of remote monitoring

1.5.1.AT+E

Function: enable/disable display function

Format:

AT+E<CR>

Return: +ok<CR><LF><CR><LF>

Note: the display function is enable by default.

1.5.2.AT+ENTM

Function: quit AT command mode

Format:

AT+ENTM<CR>

Return: +ok<CR><LF><CR><LF>

1.5.3.AT+NETP

Function: Setting/Querying Network Protocol Parameters

Format:

Query: AT+NETP<CR>

+ok=<protocol, CS, port, IP><CR><LF><CR><LF>

Settings: AT+NETP=<protocol, CS, port, IP><CR>

+ok<<CR><LF><CR><LF>

Parameters:

Protocol: Protocol type, including

- TCP
- UDP

CS: Server or client, including

- SERVER: Server-side
- CLIENT: Client

Port: Protocol port, decimal number, less than 65535

Note: TCP Server and UDP Server should not be 80 (HTTP port), 8000 (web-socket port), 49000 (USR-link port).

IP: When the module is TCP client or UDP, the address of the server (you can enter the IP address of the server or the domain name of the server).

After restarting the module, the set parameters take effect.

1.5.4.AT+UART

Function: Setting/Querying Serial Port Parameters

Format:

Query: AT+UART<CR>

+ok=<baudrate, data_bits, stop_bit, parity, flow ctrl><CR><LF>CR>LF>

Settings: AT+UART=<baudrate, data_bits, stop_bit, parity, flow ctrl><CR>

+ok<<CR><LF><CR><LF>

Parameters:

Baudrate: baud rate, 300, 600, 1200, 1800, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 230400, 345600, 460800

Data_bits: Data bits, 5, 6, 7, 8

Stop_bits: Stop bit, 5.1, 2

Parity: check point,

- NONE: No test site
- EVEN: Dual Test
- ODD: odd test

Flowctrl: Hardware Flow Control (CTSRTS)

NFC: No Hardware Flow Control

FC: Hardware Flow Control

After restarting the module, the set parameters take effect.

1.5.5.AT+UARTF

Function: Turn on/off automatic framing function

Format:

Query: AT + UARTF < CR >

+ok=<para><CR><LF><CR><LF>

Settings: AT + UARTF = < para > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

- Para: disable or enable , indicate that the automatic framing function is turned off or turned on

1.5.6.AT+UARTFT

Function: Set/query automatic frame trigger time

Format:

Query: AT +UARTFT < CR >

+ok=<time><CR><LF><CR><LF>

Settings: AT +UARTFT = < time > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

- Time: Automatic frame triggering time in ms . Value range: 100 ~ 10000.

1.5.7.AT+UARTFL

Function: Set/Query Automatic Frame Trigger Length

Format:

Query: AT +UARTFL < CR >

+ok=<len><CR><LF><CR><LF>

Settings: AT +UARTFL = < len > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

- Len: Automatic frame trigger length in byte. Range of values: 16~4096.

1.5.8.AT+TMODE

Function: Set/query data transmission mode (through mode or protocol mode)

Format:

Query: AT+TMODE<CR>

+ok=<tmode><CR><LF><CR><LF>

Settings: AT + TMODE = < tmode > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

- Tmode: Data transmission mode, including
 - Through: Transparent Transport Mode
 - Agreement: Serial Port command Mode
 - Modbus: Modbus TCP <=> Modbus RTU mode
 - Httpclient: HTTPD Client mode

After restarting the module, the set parameters take effect.

Note: The default mode is transparent transmission after power-on.

1.5.9.AT+WMODE

Function: Set/query WIFI operation mode (AP or STA)

Format:

Query: AT+WMODE<CR>

+ok=<mode><CR><LF><CR><LF>

Settings: AT+WMODE=<mode><CR>

+ok<<CR><LF><CR><LF>

Parameters:

➤ Mode: WIFI mode of operation, including

AP: Wireless Access Point Mode

STA: Wireless Terminal Mode

After restarting the module, the set parameters take effect.

1.5.10. AT+WSKEY

Function: Set/query encryption parameters in WIFI STA mode

Format:

Query: AT+WSKEY<CR>

+ok=<auth, encry, key><CR><LF><CR><LF>

Settings: AT + WSKEY = < auth, encry, key > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

➤ Auth: Authentication mode, including

OPEN

SHARED

WPAPSK

WPA2PSK

➤ Entry: Encryption algorithms, including

NONE: auth = OPEN is valid

WEP-H: auth = OPEN or SHARED is valid (WEP, HEX)

WEP-A: auth = OPEN or SHARED is valid (WEP, ASCII)

TKIP: auth = WPAPSK / WPA2PSK is valid

AES:auth= WPAPSK/WPA2PSK is valid

❖ Key: password, when encry = WEP-H, the password is 16-digit, 10-digit or 26-digit; when encry = WEP-A, the password is ASCII, 5-digit or 13-digit; WPA-PSK and WPA2-PSK are 8-63-digit;

This parameter is only valid in STA mode, and after restarting the module, the set parameters will take effect. But these parameters can also be set in AP mode.

1.5.11. AT+WSSID

Function: Set/query APSSID in WIFI STA mode

Format:

Query: AT+WSSID<CR>

+ok=<ap's ssid><CR><LF><CR><LF>

Settings: AT + WSSID = < ap's SSID > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

❖ Ap's ssid: the SSID of AP

This parameter is only valid in STA mode, and after restarting the module, the set parameters will take effect. But these parameters can also be set in AP mode.

1.5.12. AT+WSLK

Function: Query link status in wireless STA mode (can only be used in STA mode)

Format:

Query: AT + WSLK < CR >

+ok=<ret><CR><LF><CR><LF>

Parameters:

- ❖ ret:
 - If not connected: Return to Disconnected
 - If there is a connection: Return to "AP's SSID (AP's MAC)"

This parameter is valid only in STA mode.

1.5.13. AT+WEBU

Function: Set/query the login parameters (username, password) of WEB pages

Format:

Query: AT+WEBU<CR>

+ok=<usr, password><CR><LF><CR><LF>

Settings: AT + WEBU = < usr, password > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

- usr: User Name for Web Page Access
- Password: Password for Web page access

1.5.14. AT+WAP

Function: Set/query parameters in WIFI AP mode

Format:

Query: AT+WAP<CR>

+ok=<wifi_mode, ssid, channel><CR><LF><CR><LF>

Settings: AT+WAP=<wifi_mode, ssid, channel><CR>

+ok<<CR><LF><CR><LF>

Parameters:

- Wifi_mode: WIFI mode, including
 - 11BG
 - 11B
 - 11G
 - 11BGN
 - 11N
- SSID: SSID in AP mode
- Channel: WIFI Channel Selection, AUTO or CH1~CH11

This parameter is only valid in AP mode, and after restarting the module, the parameters set will take effect. But these parameters can also be set in STA mode.

AT+WAP=11BGN, SOCKAB+STA-TEST, Auto

1.5.15. AT+WAKEY

Function: Set/query encryption parameters in WIFI AP mode

Format:

Query: AT+WAKEY<CR>

+ok=<auth, encry, key><CR><LF><CR><LF>

Settings: AT + WAKEY = < auth, encry, key > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

➤ Auth: Authentication mode, including

OPEN

SHARED

WPAPSK

WPA2PSK

➤ Entry: Encryption algorithms, including

NONE: auth = OPEN is valid

WEP-H: auth = OPEN or SHARED is valid (WEP, HEX)

WEP-A: auth = OPEN or SHARED is valid (WEP, ASCII)

TKIP: auth = WPAPSK / WPA2PSK is valid

AES:auth= WPAPSK/WPA2PSK is valid

TKIPAES: auth= WPAPSK/WPA2PSK is valid

➤ Key: Password, when encry = WEP-H, the password is 16-digit, 10-digit or 26-digit; when encry = WEP-A, the password is ASCII code, 5-digit or 13-digit; WPA-PSK and WPA2-PSK passwords are 8-63-digit;

This parameter is only valid in AP mode, and after restarting the module, the parameters set will take effect. But these parameters can also be set in STA mode.

1.5.16. AT+MSLP

Function: Module goes into sleep mode (at this time, whether the module works in AP or STA mode WIFI is not available)

Format:

Query: AT + MSLP < CR >

+ok=< sta. > < CR > < LF > < CR > < LF >

Settings: AT+MSLP=<on/off><CR>

+ok<<CR><LF><CR><LF>

Parameters:

➤ When querying, sta.: Returns whether the module is sleeping, such as

On, which means no sleep.

Off, which means going to sleep

➤ When setting up, off lets the module enter sleep mode, on lets the module exit sleep mode.

- Restart the module after setting parameters.

When the module enters the sleep mode, it enters AT+MSLP=on, and the module exits the sleep mode. The mode is still command mode.

1.5.17. AT+WSCAN

Function: Search AP around

Format:

AT+WSCAN<CR>
+ok=<ap_site><CR><LF><CR><LF>

Parameters:

- Ap_site: Searched AP sites

The first line of return value is "RSSI, SSID, BSSID, Channel, Encryption, Authentication", which are signal strength, network name, MAC address, channel, authentication mode, encryption algorithm.

1.5.18. AT+TCPLK

Function: Search around AP

Format:

AT+WSCAN<CR>
+ok=<ap_site><CR><LF><CR><LF>

Parameters:

Ap_site: Searched AP sites

The first line of return value is "RSSI, SSID, BSSID, Channel, Encryption, Authentication", which are signal strength, network name, MAC address, channel, authentication mode, encryption algorithm.

1.5.19. AT+TCPDIS

Function: Link/disconnect TCP (valid only when TCP Client)

Format:

Query: AT +TCPDIS < CR >
+ok= < sta. > < CR > < LF > < CR > < LF >

Settings: AT+TCPDIS=<on/off><CR>
+ok<<CR><LF><CR><LF>

Parameters:

When querying, sta.: Returns whether TCP Client is a linkable state, such as

- On, denoted as a linkable state
- Off, denoted as an unreachable state

When setting up, “off” means setting module is in the non-linkable state, that is, after the command is issued, the module immediately disconnects the link and no longer reconnects. “on” means setting module is in the linkable state, that is, after the command is issued, the module immediately starts reconnecting the server.

1.5.20. AT+WANN

Function: Set/query WAN settings, only in STA mode

Format:

Query: AT+WANN<CR>

+ok=<mode, address, mask, gateway><CR><LF><CR><LF>

Settings: AT + WANN = < mode, address, mask, gateway > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

➤ Mode: WAN port IP mode, such as

 Static, static IP

 DHCP, Dynamic IP

➤ Address.: WAN Port IP Address

➤ Mask: WAN port subnet mask

➤ Gateway: WAN Port Gateway Address

1.5.21. AT+LANN

Function: Set/query LAN settings, only in AP mode

Format:

Query: AT+LANN<CR>

+ok=<address, mask><CR><LF><CR><LF>

Settings: AT + LANN = < address, mask > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

➤ Address.: LAN Port IP Address

➤ Mask: LAN port subnet mask

Note: WANN view module WAN port address, LAN view module LAN port address, these two IP can not be set in the same network segment, otherwise the module does not work properly.

1.5.22. AT+TCPTO

Function: Set/query TCP timeout

Format:

Query: AT+TCPTO<CR>

+ok=<time><CR><LF><CR><LF>

Settings: AT+TCPTO=<time>CR>

+ok<<CR><LF><CR><LF>

Parameters:

➤ Time: TCP timeout, <= 600 (600 seconds), >= 0 (0 means no timeout), default is 0

TCP timeout: The module TCP channel does not receive any data to start counting, and clears counting when it receives data. If the timing time exceeds the TCPTO time, the connection is disconnected. When the module works in the TCP Client, it will actively reconnect the TCP Server. When the module works as the TCP server, the TCP client needs to actively reconnect.

1.5.23. AT+MAXSK

Function: Set/query the maximum number of TCP connections

Format:

Query: AT+MAXSK<CR>

+ok=<num><CR><LF><CR><LF>

Settings: AT + MAXSK = < num > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

- Num: Maximum number of TCP connections, 1-24, default 24

When set to TCP Server, the module can support up to 24 TCP connections. If users do not need so many connections, they can set this parameter to reduce appropriately.

1.5.24. AT+TCPB

Function: Enable/Disable TCPB Function

Format:

Query: AT+TCPB<CR>

+ok= < sta. > < CR > < LF > < CR > < LF >

Settings: AT+TCPB=<on/off><CR>

+ok<<CR><LF><CR><LF>

Parameters:

When querying, sta.: Returns whether TCPB functionality is enabled, such as

1. on, representing TCPB enablement

2. Off, which means TCPB is not enabled

After restarting the module, the set parameters take effect.

1.5.25. AT+TCPPTB

Function: Set/query TCPB port number

Format:

Query: AT+TCPPTB<CR>

+ok=<port><CR><LF><CR><LF>

Settings: AT + TCPPTB = < port > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

- Port: Protocol port, decimal number, less than 65535

After restarting the module, the set parameters take effect.

1.5.26. AT+TCPADDB

Function: Set up / query TCPB server

Format:

Query: AT+TCPADDB <CR>

+ok=<add><CR><LF><CR><LF>
Settings: AT +TCPADDB = < add > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

- Add: The server address of TCPB (you can enter the IP address of the server or the domain name of the server).

After restarting the module, the set parameters take effect.

1.5.27. AT+TCPTOB

Function: Set/query TCPB timeout

Format:

Query: AT +TCPTOB < CR >

+ok=<time><CR><LF><CR><LF>

Settings: AT +TCPTOB = < time > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

- Time.: TCPB timeout, <= 600 (600 seconds), >= 0 (0 means no timeout), default is 0

1.5.28. AT+TCPLKB

Function: Query whether TCPB links have been established

Format:

AT+TCPLKB<CR>

+ok=<sta><CR><LF><CR><LF>

Parameters:

- Sta.: Return to TCPB to establish a chain, such as
 - On, indicating that a chain has been established
 - Off ,means no chain is built.

1.5.29. AT+EPHY

Function: Turn on/off Ethernet interface

Format:

Settings: AT + EPHY < CR >

+ok<<CR><LF><CR><LF>

Parameters:

After entering this command, open the Ethernet port. This command is not saved, that is, Ethernet is not enabled after restart. If you want to save the settings enabled by the Ethernet port, you need to use the factory settings command. If you need to permanently open the Ethernet port, use the AT + FEPHY = on command.

The power consumption of the module can be reduced after the Ethernet interface is closed, so it is recommended that when the Ethernet interface is not used, it should be turned off. The Ethernet port is open by default.

With AT+FVEW=disable/enable, you can set whether the module network ports work at LAN port or WAN port. This command restores the factory settings to take effect.

1.5.30. AT+HTTPSCEN

Function: Setting/Query HTTPD Client Long Connection/Short Connection

Format:

Query: AT+HTTPSCEN <CR>

+ok=<mode><CR><LF><CR><LF>

Settings: AT + HTTPSCEN = < mode > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

➤ Mode: HTTPD Client mode of operation, including

Long: Long Connection Mode

Short: Short Connection Mode

After restarting the module, the set parameters take effect.

1.5.31. AT+AABR

Function: adaptive baud rate function turn on and off command

Format:

AT+AABR=on/off<CR>

+ok<<CR><LF><CR><LF>

This command enables or disables the adaptive baud rate function, which is turned on by default.

1.5.32. AT+DHCPDEN

Function: Turn on/off the DHCP Server function of LAN port

Format:

AT+DHCPDEN=on/off<ID>CR>

+ok=<ID><CR><LF><CR><LF>

Parameters:

This command enables or disables the DHCP Server function of LAN port, which is turned on by default.

1.5.33. AT+HIDESSID

Function: Turn on/off SSID to hide module AP

Format:

AT+HIDESSID=on/off<CR>

+ok<<CR><LF><CR><LF>

This command enables or prohibits the SSID of the module AP, which is turned off by default.

1.5.34. AT+DOMAIN

Function: Setting/Query Domain Name of Login Module Web Page

Format:

Query: AT+DOMAIN<CR>

+ok=<name><CR><LF><CR><LF>
Settings: AT + DOMAIN = < name > < CR >
+ok<<CR><LF><CR><LF>

Parameters:

- Name: The domain name of the landing module page.

1.5.35. AT+RELD

Function: Restore factory settings

Format:

AT+ RELD<CR>
+ok = rebooting... <<CR><LF><CR>LF>

This command restores the factory settings of the module and then restarts automatically

1.5.36. AT+Z

Function: reboot device

Format:

AT+Z<CR>

1.5.37. AT+MID

Function: Query Module MID

Format:

Query: AT+MID<CR>
+ok=<module_id><CR><LF><CR><LF>

Parameters:

- Module_id: Module MID, format
A11-yyymmddnn
- yyymmdd: Indicates the date of production, year, month and day, respectively
- nnnn: Represents the serial number of production

1.5.38. AT+VER

Function: Query software version

Format:

Query: AT+VER<CR>
+ok=<ver><CR><LF><CR><LF>

Parameters:

- ver: Return to Module Software Version

1.5.39. AT+H

Function: Help command

Format:

Query: AT+H<CR>
+ok=<commode help><CR><LF><CR><LF>

1.5.40. AT+WSQY

Function: Set/query the signal threshold (percentage) for switching under STA parameter set

Format:

Query: AT + WSQY < CR >
+ok=<ret><CR><LF><CR><LF>

Settings: AT + WSQY = < RET > < CR >
+ok<<CR><LF><CR><LF>

Parameters:

- ❖ ret:
 - Percentage of signal strength, such as signal strength of 50%, should be set at AT+WSQY=50<CR>

Note: If set to 100, the module will not automatically switch the WIFI network. If the customer only uses one STA parameter, be sure to set it to 100.

1.5.41. AT+HTPMODE

Functions: New and old HTTP header settings switching (HTTPD Client)

Format:

Query: AT+HTPMODE<CR>
+ok=<type><CR><LF><CR><LF>

Settings: AT + HTPMODE = < type > < CR >
+ok<<CR><LF><CR><LF>

Parameters:

- ❖ type: Authentication mode, including
 - new: New HTTP header settings
 - old: Old HTTP header settings

This parameter is valid only in HTTPD Client mode, and after restarting the module, the parameters set will take effect. But this parameter can also be set in other modes.

1.5.42. AT+HTTPURL

Functions: Old version settings / query HTTP server IP and port

Format:

Query: AT + HTTP URL < CR >
+ok=<ip>, <port><CR><LF><CR><LF>

Settings: AT + HTTP URL = < IP >, < port > < CR >
+ok<<CR><LF><CR><LF>

Parameters:

- IP: IP of HTTP server.
- Port: Port of the HTTP server.

1.5.43. AT+HTTPTP

Function: Old version Setting/ Query HTTP Request Type

Format:

Query: AT + HTTPTP < CR >

+ok=<Type><CR><LF><CR><LF>

Settings: AT + HTTPTP = < Type > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

➤ Type: The type of HTTP request, such as

GET

PUT

POST

1.5.44. AT+HTTPPH

Function: Old version Setting / Query HTTP Header Path

Format:

Query: AT + HTTPPH < CR >

+ok=<path><CR><LF><CR><LF>

Setting: AT + HTTPPH = < Path > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

➤ Path: HTTP protocol header path.

1.5.45. AT+HTTPCN

Function: Connection for setting/querying HTTP protocol header in old version

Format:

Query: AT + HTTPCN < CR >

+ok=<Connection><CR><LF><CR><LF>

Settings: AT + HTTPCN = < Connection > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

Connection: Connection of HTTP Header.

1.5.46. AT+HTTPUA

Function: User-Agent for setting/querying HTTP protocol header in old version

Format:

Query: AT + HTTPUA < CR >

+ok=<User-Agent><CR><LF><CR><LF>

Settings: AT + HTTPUA = < User-Agent > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

- User-Agent: User-Agent of HTTP protocol header.

1.5.47. AT+HTPSV

Functions: New version of settings / query HTTP server IP and port

Format:

Query: AT +HTPSV < CR >

+ok=<ip>, <port><CR><LF><CR><LF>

Settings: AT +HTPSV = < IP >, < port > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

- IP: IP of HTTP server.

- Port: Port of the HTTP server.

This parameter is valid only in HTTPD Client mode, and after restarting the module, the parameters set will take effect. But these parameters can also be set in other modes.

1.5.48. AT+HTPTP

Function: New version settings / query HTTP request type

Format:

Query: AT +HTPTP < CR >

+ok=<Type><CR><LF><CR><LF>

Settings: AT +HTPTP = < Type > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

- Type: The type of HTTP request, such as

GET

PUT

POST

This parameter is valid only in HTTPD Client mode, and after restarting the module, the parameters set will take effect. But these parameters can also be set in other modes.

1.5.49. AT+HTPURL

Function: New version settings / query HTTP protocol header path

Format:

Query: AT +HTPURL < CR >

+ok=<path><CR><LF><CR><LF>

Settings: AT +HTPURL = < Path > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

- Path: HTTP request path.

1.5.50. AT+HTPHEAD

Function: New Settings / Query HTTP Header Content

Format:

Query: AT + HTPHEAD < CR >

+ok=<head><CR><LF><CR><LF>

Settings: AT + HTPHEAD = < head > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

- Head: HTTP header content. Replace the return line in the header with the string<CRLF>, up to 200 bytes.

1.5.51. AT+REGEN

Function: Set/query the type of registry package

Format:

Query: AT + REGEN < CR >

+ok=<mode><CR><LF><CR><LF>

Settings: AT + REGEN = < mode > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

- Mode: Registered package type, such as
 - mac: Register Packet is MAC Address
 - cloud: Someone passes through the cloud registration package
 - usr: User-defined registration package
 - off: Do not open the registry package function

Example: AT + REGEN = MAC

1.5.52. AT+REGTCP

Function: Setting/querying the way of registering packages

Format:

Query: AT+REGTCP<CR>

+ok=<type><CR><LF><CR><LF>

Settings: AT + REGTCP = < type > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

Type: Registered package type, such as

first: The module sends the registration package when it establishes the connection

every: Send registration packages every time data is sent

1.5.53. AT+WTPWR

Function: Setting module transmit power

Format:

Query: AT + WTPWR <CR>
+ok=<sta.><CR><LF><CR><LF>

Settings: AT + WTPWR = <sta><CR>
+ok<<CR><LF><CR><LF>

Parameters:

Sta.: Module transmit power size, range 0-100, default to maximum 100.

1.5.54. AT+REGCLOUD

Function: Set/query the serial number and password of the cloud transmission device

Format:

Query: AT+REGCLOUD<CR>
+ok=<name, password><CR><LF><CR><LF>

Settings: AT+REGCLOUD=<name, password><CR>
+ok<<CR><LF><CR><LF>

Parameters:

Name: User device number 20.

password: device password up to 8 bits

Example: AT + REGCLOUD = 00004219000000600, 123456

1.5.55. AT+REGUSR

Function: Set/query user-defined registry package content

Format:

Query: AT+REGUSR<CR>
+ok=<usr><CR><LF><CR><LF>

Settings: AT+REGUSR=<usr><CR>
+ok<<CR><LF><CR><LF>

Parameters:

usr: Length is limited to 40 characters. Settings need to be converted to HEX format.

Example: Set the content of the custom registration package to www.usr.cn, corresponding to the HEX format of
"77 77 77 2E 75 73 72 2E 63 6E"

AT+REGUSR=7777772E7573722E636E

1.5.56. AT+TCPDPEN

Function: Open/close socket distribution function

Format:

Query: AT+TCPDPEN <CR>
+ok=<sta.><CR><LF><CR><LF>

Settings: AT + TCPDPEN = <on/off> <CR>
+ok<<CR><LF><CR><LF>

Parameters:

When querying, sta.: Returns whether the socket distribution function is turned on, such as

on, which means to turn on socket distribution
off, which means closing the socket distribution function
After restarting the module, the set parameters take effect.

1.5.57. AT+HEARTEN

Function: Turn on/off the custom heartbeat package function

Format:

Query: AT+HEARTEN <CR>

+ok= < sta. > < CR > < LF > < CR > < LF >

Settings: AT + HEARTEN = < on/off > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

When querying, sta.: Returns whether the custom heartbeat package function is turned on, such as

on, which means to turn on the custom heartbeat package function

off, which means turning off the custom heartbeat package function

After restarting the module, the set parameters take effect.

1.5.58. AT+HEARTTP

Function: Set/query custom heartbeat packet sending direction

Format:

Query: AT + HEARTTP < CR >

+ok= < sta. > < CR > < LF > < CR > < LF >

Settings: AT + HEARTTP = <NET/COM> <CR>

+ok<<CR><LF><CR><LF>

Parameters:

When querying, sta.: Returns the customized direction of heartbeat packet delivery, such as

NET, which means that a custom heartbeat packet is sent to the network end

COM, which means custom heartbeat package sent to serial port

After restarting the module, the set parameters take effect.

1.5.59. AT+HEARTDT

Function: Set/query custom heartbeat data

Format:

Query: AT+HEARTDT<CR>

+ok=<usr><CR><LF><CR><LF>

Settings: AT+HEARTDT=<usr>CR>

+ok<<CR><LF><CR><LF>

Parameters:

usr: The length is limited to 40 characters, and the settings need to be converted to HEX format.

Example: Set the content of the custom heartbeat package to www.usr.cn, corresponding to the HEX format of "77 77 77 2E 75 73 72 2E 63 6E"

AT+REGUSR=7777772E7573722E636E

1.5.60. AT+HEARTTM

Function: Set/query custom heartbeat packet sending interval

Format:

Query: AT + HEARTTM < CR >

+ok=<time><CR><LF><CR><LF>

Settings: AT + HEARTTM = < time > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

Custom Heart Packet Delivery Time Interval, 1-65535s, Default 30s

1.5.61. AT+REBOOTEN

Function: enable/disable timing restart function

Format:

Query: AT+REBOOTEN<CR>

+ok= < sta. > < CR > < LF > < CR > < LF >

Settings: AT+REBOOTEN=<on/off><CR>

+ok<<CR><LF><CR><LF>

Parameters:

When querying, sta.: Returns whether the timer restart function is turned on, such as

on, which means to turn on the timing restart function

off, which means shutting down the timing restart function

After restarting the module, the set parameters take effect.

1.5.62. AT+REBOOTT

Function: Set/Query Timing Restart Time

Format:

Query: AT + REBOOTT < CR >

+ok=<time><CR><LF><CR><LF>

Settings: AT + REBOOTT = < time > < CR >

+ok<<CR><LF><CR><LF>

Parameters:

Time.: Timed reboot time, 1-720h, default 24h

1.5.63. AT+TIMEOUTEN

Function: Turn on/off timeout restart function

Format:

Query: AT+TIMEOUTEN<CR>

+ok= < sta. > < CR > < LF > < CR > < LF >

Settings: AT+TIMEOUTEN=<on/off><CR>

+ok<<CR><LF><CR><LF>

Parameters:

When querying, sta.: Returns whether the timeout restart function is turned on, such as

on, which means to turn on timeout restart function

off, which means turning off the timeout restart function

After restarting the module, the set parameters take effect.

1.5.64. AT+TIMEOUTT

Function: Set/Query Overtime Restart Time

Format:

Query: AT+TIMEOUTT<CR>

+ok=<time><CR><LF><CR><LF>

Settings: AT+TIMEOUTT=<time>CR>

+ok<<CR><LF><CR><LF>

Parameters:

Time.: Overtime restart time, 60-65535s, default 3600s

1.5.65. AT+FAPSTA

Function: AP+STA open close command

Format:

AT+FAPSTA=on/off<CR>

+ok<CR><LF><CR><LF>

The command to enable or disable the AP+STA function, AP+STA is off by default, the command is set after the restore factory settings to take effect.

1.5.66. AT+MODBPOLLEN

Function: Modbus polling function of opening and closing command

Format:

AT+MODBPOLLEN =on/off<CR>

+ok<CR><LF><CR><LF>

The command to enable or disable the Modbus polling function, the default Modbus polling function is closed, the command is set after the restart module effect.

1.5.67. AT+UPDATE

Function: set the remote update / query parameters

Format:

Query: AT+UPDATE<CR>

+ok=<state, server address, server port, interval ><CR><LF><CR><LF>

Setting: AT+ UPDATE =< state server, address, server port, interval ><CR>

+ok<CR><LF><CR><LF>

Parameter:

The state state: on/off

The server server address: Address

➤ The default is ycsj1.usr.cn

The server server port: Port

➤ default 30001

The interval report: time interval

➤ The default is 30min, the maximum time interval (max): 120min

Restart module, effective parameter settings

1.5.68. AT+MONITOR

Function: Setting/querying remote monitoring parameters

Format:

Query: AT + MONITOR < CR >

+ok=<state, interval><CR><LF><CR><LF>

Settings: AT + MONITOR = < state, interval > < CR >

+ok < CR > < LF > < CR > < LF >

Parameters:

State: on/off

Interval: reporting interval

Default 10 minutes, maximum time interval (max): 120 minutes

After restarting the module, the set parameters take effect.

2. Contact Us

Company: Jinan USR IOT Technology Limited

Address: Floor 11, Building 1, No. 1166 Xinluo Street, Gaoxin District, Jinan, Shandong, 250101, China

Web: www.usriot.com

Support: h.usriot.com

Email: sales@usr.cn

Tel: 86-531-88826739/86-531-55507297

3.Disclaimer

This document provide the information of USR-W630 products, it hasn't been granted any intellectual property license by forbidding speak or other ways either explicitly or implicitly. Except the duty declared in sales terms and conditions, we don't take any other responsibilities. We don't warrant the products sales and use explicitly or implicitly, including particular purpose merchantability and marketability, the tort liability of any other patent right, copyright, intellectual property right. We may modify specification and description at any time without prior notice.

4. Update History

Edition	Describe
V1.0.3	2018-06-28 establish