

USR-G806 AT Command Set

File version: 1.0.1

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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

After user configures the USR device by AT command, user should restart the device to make the settings take effect. Every AT command must add character carriage return <CR> and line feed <LF>. In Hex, <CR> is 0x0D <LF> is 0x0A.

2.1. Send AT commands by remote management platform

If device has connected to remote management platform, user can send AT command to configure or query parameters via remote management platform. Settings will take effect after restarting. For example, if user wants to query firmware version via remote management platform, user can send the command below.

```
AT+VER
```

2.2. SMS AT command

User can configure device or query status by SMS AT command to remotely control device in fields(SIM card must support SMS function). For example, user can send the command below to query the firmware version of the device:

```
root #AT+VER
```

root is password and there should be '#' between the password and command.

3. AT command set

Command	Function
Version command	
AT+VER	Query firmware version
AT+MAC	Query MAC
AT+ICCID	Query ICCID code
AT+IMEI	Query IMEI code
4G interface command	
AT+SYSINFO	Query network information
AT+APN	Query/Set APN
AT+CSQ	Query RSSI
AT+TRAFFIC	Query traffic information
System command	
AT+UPTIME	Query device running time
AT+WANN	Query WAN interface parameters
AT+LANN	Query/Set LAN interface parameters
AT+WEBU	Query/Set Web Server username and password
AT+PLANG	Set default language of Web Server
AT+RELD	Reset to default settings
AT+Z	Restart device
AT+DHCPEN	Set DHCP Server on/off
Remote upgrade and monitoring command	
AT+UPDATE	Query/Set remote upgrade parameters
AT+MONITOR	Query/Set remote monitoring parameters
AT+HEARTPKT	Query/Set remote monitoring heartbeat packet parameters
Execute Linux command	
AT+LINUXCMP	Execute Linux command and return executive information

4. AT command details

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

4.1. AT+VER

Format	
Query	AT+VER<CR>
Return	<CR><LF>+VER:<Version><CR><LF>

- Common version: AA.BB.CC: AA represents major version, BB represents minor version and CC represents hardware version.

➤ Custom version: AA.BB.CC.DD-ID: DD represents customer's version, ID represents customer's ID number.

4.2. AT+MAC

Format	
Query	AT+MAC<CR>
Return	<CR><LF>+MAC=<MAC><CR><LF>

4.3. AT+ICCID

Format	
Query	AT+ICCID<CR>
Return	<CR><LF>+ICCID:<ICCID code><CR><LF><CR><LF>

4.4. AT+IMEI

Format	
Query	AT+IMEI<CR> or AT+IMEI?<CR>
Return	<CR><LF>+IMEI:<IMEI code><CR><LF><CR><LF>OK<CR><LF>

4.5. AT+SYSINFO

Parameter	Description	Range
<Operator>	Network operator	CHINA-MOBILE/CHINA-UNICOM/CHN-CT, CHINA-TELECOM
<Mode>	Network mode	2G mode/3G mode/4G mode
Format		
Query	AT+SYSINFO<CR>	
Return	<CR><LF>+SYSINFO:<Operator>,<Mode><CR><LF><CR><LF>	

4.6. AT+APN

Parameter	Description
<Code>	APN code
<Name>	APN username
<Password>	APN password
Format	
Query	AT+APN<CR>
Return	<CR><LF>+APN:<Code>,<Name>,<Password><CR><LF><CR><LF>OK<CR><LF>
Set	AT+APN=<Code>,<Name>,<Password><CR>
Return	<CR><LF>OK<CR><LF>

4.7. AT+CSQ

Format

Query	AT+CSQ<CR>
Return	<CR><LF>+CSQ:<RSSI><CR><LF>

4.8. AT+TRAFFIC

Parameter	Description
<Down>	Downstream traffic between two timestamps. Unit: byte.
<Up>	Upstream traffic between two timestamps. Unit: byte.
<Pro_time>	Timestamp of the previous time report.
<At_time>	Timestamp of this time report.
Format	
Query	AT+TRAFFIC<CR>
Return	<CR><LF>+TRAFFIC:<Down>,<Up>,<Pro_time>,<At_time><CR><LF>

4.9. AT+UPTIME

Parameter	Description
<Second>	The total number of seconds of system running.
<Time>	System running time: day, hour, minute.
Format	
Query	AT+UPTIME<CR>
Return	<CR><LF>+UPTIME:<Second>,<Time><CR><LF>

4.10. AT+WANN

Parameter	Description	Range
<Mode>	IP address mode	static/DHCP
<Address>	IP address	0.0.0.0~255.255.255.255
<Mask>	Subnet mask	0.0.0.0~255.255.255.255
<Gateway>	Gateway	0.0.0.0~255.255.255.255
Format		
Query	AT+WANN<CR>	
Return	<CR><LF>+WANN=<Mode>,<Address>,<Mask>,<Gateway><CR><LF>	

4.11. AT+LANN

Parameter	Description	Default Value	Range
<Gateway>	Gateway of LAN interface	192.168.1.1	0.0.0.0~255.255.255.255
<Mask>	Subnet mask of LAN interface	255.255.255.0	0.0.0.0~255.255.255.255
Format			
Query	AT+LANN<CR>		
Return	<CR><LF>+LANN:<Gateway>,<Mask><CR><LF>		
Set	AT+LANN=<Gateway>,<Mask><CR>		
Return	<CR><LF>+LANN:OK<CR><LF>		

4.12. AT+WEBU

Parameter	Description	Default Value
<Username>	Web Server username	root
<Password>	Web Server password	root
Format		
Query	AT+WEBU<CR>	
Return	<CR><LF>+WEBU:<Username>,<Password><CR><LF>	
Set	AT+WEBU=<Username>,<Password><CR>	
Return	<CR><LF>+WEBU:OK<CR><LF>	

4.13. AT+PLANG

Parameter	Description	Range
<Language>	Default language of Web Server	EN: English
		ZH_CN: Chinese
Format		
Set	AT+PLANG=<Language><CR>	
Return	<CR><LF>+PLANG:OK<CR><LF>	

4.14. AT+RELD

Format	
Set	AT+RELD<CR>
Return	<CR><LF>+RELD:OK<CR><LF>

4.15. AT+Z

Format	
Set	AT+Z<CR>
Return	<CR><LF>+Z:OK<CR><LF>

4.16. AT+DHCPEN

Parameter	Description	Range
<Status>	Enable/disable DHCP Server	ON/OFF
Format		
Set	AT+DHCPEN=<Status><CR>	
Return	<CR><LF>+DHCPEN:OK<CR><LF>	

4.17. AT+UPDATE

Parameter	Description	Range
<Status>	Enable/disable remote upgrade	on/off
<Address>	Remote upgrade server address	0.0.0.0~255.255.255.255
<Port>	Remote upgrade server port	1~65535
<Interval>	Reporting interval of status information	
Format		

Query	AT+UPDATE<CR>
Return	<CR><LF>+UPDATE:<Status>,<Address>,<Port>,<Interval><CR><LF>
Set	AT+UPDATE=<Status>,<Address>,<Port>,<Interval><CR>
Return	<CR><LF>+UPDATE:OK<CR><LF>

4.18. AT+MONITOR

Parameter	Description	Range
<Status>	Enable/disable remote monitoring	on/off
<Address>	Remote monitoring server address	0.0.0.0~255.255.255.255
<Port>	Remote monitoring server port	1~65535
<Interval>	Reporting interval of status information	
Format		
Query	AT+MONITOR<CR>	
Return	<CR><LF>+MONITOR:<Status>,<Address>,<Port>,<Interval><CR><LF>	
Set	AT+MONITOR=<Status>,<Address>,<Port>,<Interval><CR>	
Return	<CR><LF>+MONITOR:OK<CR><LF>	

4.19. AT+HEARTPKT

Parameter	Description
<Interval>	Heartbeat packet sending interval
<Data>	Heartbeat packet data
Format	
Query	AT+HEARTPKT<CR>
Return	<CR><LF>+HEARTPKT:<Interval>,<Data><CR><LF>
Set	AT+HEARTPKT=<Interval>,<Data><CR>
Return	<CR><LF>+HEARTPKT:OK<CR><LF>

4.20. AT+LINUXCMP

Parameter	Description
<CMP>	Linux command
Format	
Set	AT+LINUXCMP=<CMP><CR>
Return	<CR><LF>+LINUXCMP:result<CR><LF>

5. Contact

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6. Disclaimer

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7. Update History

2018-06-19 V1.0.0 created.

2018-06-25 V1.0.1 updated. Modified **2.2. SMS AT command**. Corrected grammatical mistakes.