

USR-GM3 AT Command Set

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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

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

2.2. Transparent transmission AT command mode

When module in transparent transmission mode, user can use "Password#AT command" format to send AT command to configure or query parameters via serial or network. If user uses transparent AT command, user doesn't need to enter AT command mode. The format is as follow. Settings will take effect after restarting.

Passwords#AT command

For example, if user wants to query serial port parameters via network or serial port, user can send the command below.

usr.cn#AT+UART

usr.cn is default password, user can modify it to user own password(To modify the password, user can use AT+CMDPW). AT+UART is the AT command to query the serial port parameters. There should be '#' between the password and command.

2.3. SMS AT command mode

User can configure module or query status by SMS AT command to remotely control module in fields. SMS AT command can achieve sending more than one AT command by only one message after firmware version V3.0. User can achieve it by adding ";" after each AT command(Single AT command also needs to add ";"). For example, user can send the command below to query the serial port parameters and socket A parameters of the module simultaneously:

usr.cn #AT+UART;usr.cn#AT+SOCKA;

usr.cn is default password, user can modify it to user own password(To modify the password, user can use AT+CMDPW). There should be '#' between the password and command.



3. AT command set

Command Function			
	Management Command		
Н	Query help message		
Z	Restart the module		
E	Query/Set AT command echo function enable/disable		
ENTM	Exit serial AT command mode and enter work mode		
WKMOD	Query/Set work mode of module		
CALEN	Query/Set Phone function enable/disable		
NATEN	Query/Set network AT command in transparent transmission mode enable/disable		
UATEN	Query/Set serial port AT command in transparent transmission mode enable/disable		
CMDPW	Query/Set transparent transmission AT command and SMS AT command password		
CACHEN	Query/Set Cache Data function enable/disable		
STMSG	Query/Set Welcome message of module		
RSTIM	Query/Set timeout restart function time		
SLEEP	Query/Set Sleep mode enable/disable		
SLEEPTIM	Query/Set time to enter Sleep mode		
S	Saving current settings		
RELD	Reset to default settings		
CLEAR	Reset to factory settings		
CFGTF	Saving current settings as default settings		
VER	Query firmware version		
SN	Query SN code		
ICCID	Query ICCID code		
IMEI	Query IMEI code		
CNUM	Query phone number		
	Serial port and socket command		
UART	Query/Set serial port parameters		
RFCEN	Query/Set baud rate synchronization function enable/disable		
APN	Query/Set APN parameters		
SOCKA	Query/Set socket A parameters		
SOCKB	Query/Set socket B parameters		
SOCKAEN	Query/Set socket A enable/disable		
SOCKBEN	Query/Set socket B enable/disable		
SOCKASL	Query/Set socket A connection type in TCP mode		
SOCKBSL	Query/Set socket B connection type in TCP mode		
SOCKALK	Query socket A connection status		
SOCKBLK	Query socket B connection status		
SOCKIDEN	Query/Set displaying socket ID function enable/disable		



Identity packet command				
REGEN	Query/Set identity packet enable/disable			
REGTP	Query/Set identity packet type			
REGID	Query/Set identity packet ID			
REGDT	Query/Set user editable identity packet data			
REGSND	Query/Set identity packet sending method			
	Heartbeat packet command			
HEARTEN	Query/Set heartbeat packet enable/disable			
HEARTDT	Query/Set user editable heartbeat packet data			
HEARTTP	Query/Set type of heartbeat packet			
HEARTTM	Query/Set heartbeat packet interval			
	HTTP Client mode command			
HTPTP	Query/Set HTTP requesting method in HTTP Client mode			
HTPURL	Query/Set HTTP URL in HTTP Client mode			
HTPSV	Query/Set HTTP server address and port in HTTP Client mode			
HTPHD	Query/Set HTTP header in HTTP Client mode			
HTPPK Query/Set filtering HTTP header of response data enable/disable in HTTP Client mod				
	SMS transparent transmission mode command			
DSTNUM	Query/Set Target phone number of message			
SMSEND	Sending message			
	USR Cloud command			
CLOUDEN	Query/Set USR Cloud enable/disable			
CLOUDID	Query/Set USR Cloud ID of module			
CLOUDPA	Query/Set USR Cloud password of module			
	Other command			
LBS	Query LBS information			
GPIO1	Query/Set status of GPIO1(UART2_RTS of module)			
GPIO2	Query/Set status of GPIO2(I2C_SCL of module)			
CSQ?	Query RSSI			

4. AT command details

Special Characters			
Character Note Hex			
<cr> Carriage Return 0x0D</cr>			
<lf> Line Feed 0x0A</lf>			



4.1. AT+H

Format			
Query AT+H <cr></cr>			
Return <cr><lf><help message=""><cr><lf>CR><lf>OK<cr><lf></lf></cr></lf></lf></cr></help></lf></cr>			

4.2. AT+Z

Format		
Set AT+Z <cr></cr>		
Return <cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.3. AT+E

Parameter	Description	Default Value	Range	
<status></status>	Status of AT command Echo function	ON	ON/OFF	
	Format			
Query	AT+E <cr></cr>			
Return	<cr><lf>+E:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>			
Set	AT+E= <status><cr></cr></status>			
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>			

4.4. AT+ENTM

Format		
Set AT+ENTM <cr></cr>		
Return <cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.5. AT+WKMOD

Parameter	Description	Default Value Range		
		"CMD": AT command mode		
		"SMS": SMS transparent transmission mode "NET": Network transparent		
<mode></mode>	Work mode of	"NET"	"ATENTO	mode
<mode></mode>	module		"NET": Network transparent	
			transmission mode	
			"HTTPD": HTTP Client mode	
Format				
Query	AT+WKMOD <cr></cr>			



Return	<cr><lf>+WKMOD:<mode><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></mode></lf></cr>		
Set	AT+WKMOD= <mode><cr></cr></mode>		
Return <cr><lf>OK<cr><lf></lf></cr></lf></cr>			

4.6. AT+CALEN

Parameter	Description	Default Value	Range		
<status></status>	Status of Phone Function OFF		ON/OFF		
	Format				
Query	AT+CALEN <cr></cr>				
Return	<cr><lf>+CALEN:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>				
Set	AT+CALEN= <status><cr></cr></status>				
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>				

4.7. AT+NATEN

Parameter	Description	Default Value	Range
	Status of network AT command		
<status></status>	in transparent transmission	ON	ON/OFF
	mode		
	Format		
Query	AT+NATEN <cr></cr>		
Return	<cr><lf>+NATEN:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>		
Set	AT+NATEN= <status><cr></cr></status>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.8. AT+UATEN

Parameter	Description	Default Value	Range
<status></status>	Status of serial port AT command in	OFF	ON/OFF
	transparent transmission mode		
	Format		
Query	AT+UATEN <cr></cr>		
Return	<cr><lf>+UATEN:<status><cr><lf>CR><lf>OK<cr><lf></lf></cr></lf></lf></cr></status></lf></cr>		
Set	AT+UATEN= <status><cr></cr></status>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		



4.9. AT+CMDPW

Parameter	Default Value Range		
<password></password>	"usr.cn"	Less than 6 bytes	
	Forn	nat	
Query	AT	AT+CMDPW <cr></cr>	
Return	<cr><lf>+CMDPW:<password><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></password></lf></cr>		
Set	AT+CMDPW= <password><cr></cr></password>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.10. AT+CACHEN

Parameter	Description	Default Value	Range
<status></status>	Status of Cache Data	ON	ON/OFF
	Form	at	
Query	AT+CACHEN <cr></cr>		
Return	<cr><lf>+CACHEN:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>		
Set	AT+CACHEN= <status><cr></cr></status>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.11. AT+STMSG

Parameter	Description Default Value	
<message></message>	Welcome message of module "USR-GM3 V2.1"	
	Format	
Query	AT+STMSG <cr></cr>	
Return	<cr><lf>+STMSG:<message><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></message></lf></cr>	
Set	AT+STMSG= <message><cr></cr></message>	
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>	

4.12. AT+RSTIM

Parameter	Description	Default Value	Range
<time></time>	Timeout reset function time	1800s	0s: Closing function
	Forn	nat	
Query	AT+RSTIM <cr></cr>		
Return	<cr><lf>+RSTIM:<time><cr><lf>CR><lf>OK<cr><lf></lf></cr></lf></lf></cr></time></lf></cr>		
Set	AT+RSTIM= <time><cr></cr></time>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		



4.13. AT+SLEEP

Parameter	Description	Default Value	Range
<status></status>	Status of Sleep mode	OFF	ON/OFF
	Form	at	
Query	A	Γ+SLEEP <cr></cr>	
Return	<cr><lf>+SleepMode:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>		
Set	AT+SLEEP= <status><cr></cr></status>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.14. AT+SLEEPTIM

Parameter	Description	Default Value	Range
<time></time>	Time to enter Sleep mode	0s	0s: Closing function
	F	ormat	
Query	AT+SLEEPTIM <cr></cr>		
Return	<cr><lf>+SLEEPTIM:<time><cr><lf>OK<cr><lf></lf></cr></lf></cr></time></lf></cr>		
Set	AT+SLEEPTIM= <time><cr></cr></time>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.15. AT+S

Format	
Set	AT+S <cr></cr>
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>

4.16. AT+RELD

	Format
Set	AT+RELD <cr></cr>
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>

4.17. AT+CLEAR

	Format
Set	AT+CLEAR <cr></cr>
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>



4.18. AT+CFGTF

Format	
Set	AT+CFGTF <cr></cr>
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>

4.19. AT+VER

Format		
Query AT+VER <cr></cr>		
Return	<cr><lf>+VER:<version><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></version></lf></cr>	

4.20. AT+SN

Format		
Query AT+SN <cr></cr>		
Return <cr><lf>+SN:<sn code=""><cr><lf>CR><lf>OK<cr><lf></lf></cr></lf></lf></cr></sn></lf></cr>		

4.21. AT+ICCID

Format		
Query AT+ICCID <cr></cr>		
Return	<cr><lf>+ICCID:<iccid code=""><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></iccid></lf></cr>	

4.22. AT+IMEI

Format		
Query AT+IMEI <cr></cr>		
Return	<cr><lf>+IMEI:<imei code=""><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></imei></lf></cr>	

4.23. AT+CNUM

Format		
Query AT+CNUM <cr></cr>		
Return	<cr><lf>+CNUM:<phone number=""><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></phone></lf></cr>	



4.24. AT+UART

Parameter	Description	Default Value	Range	
			1500, 2400, 4800, 9600, 14400, 19200,	
<baud rate=""></baud>	Baud rate	115200	38400, 57600, 115200, 128000,	
			230400, 460800, 921600	
<data bits=""></data>	Data bits	8	7,8	
<stop bits=""></stop>	Stop bits	1	1, 2	
<parity></parity>	Parity	NONE	NONE, EVEN, ODD	
	Flow Control	NFC	NFC: No flow control	
<flow< td=""><td>FC: Hardware flow control(RTS/CTS)</td></flow<>			FC: Hardware flow control(RTS/CTS)	
Control>			485: UART_RTS used to 485	
			communication	
		Format		
Query	AT+UART <cr></cr>			
Return	<cr><lf>+UART:<baud rate="">,<parity>,<data bits="">,<stop bits=""><flow< td=""></flow<></stop></data></parity></baud></lf></cr>			
Return	Control> <cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr>			
Set	AT+UART= <baud rate="">,<parity>,<data bits="">,<stop bits=""><flow< td=""></flow<></stop></data></parity></baud>			
Set	Control> <cr></cr>			
Return		<cr><i< td=""><td>LF>OK<cr><lf></lf></cr></td></i<></cr>	LF>OK <cr><lf></lf></cr>	

4.25. AT+RFCEN

Parameter	Description	Default Value	Range
<status></status>	Status of baud rate synchronization function	OFF	ON/OFF
Format			
Query	AT+RFCEN <cr></cr>		
Return	<cr><lf>+RFCEN:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>		
Set	AT+RFCEN= <status><cr></cr></status>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.26. AT+APN

Parameter	Description	Default Value
<code></code>	APN code	CMNET
<name></name>	User name	No Default Value
<password></password>	User password	No Default Value



Format		
Query	AT+APN <cr></cr>	
D - 4	<cr><lf>+APN:<code><name><password><cr><lf><cr><lf>OK<cr><lf< td=""></lf<></cr></lf></cr></lf></cr></password></name></code></lf></cr>	
Return	>	
Set	AT+APN= <code><name><password><cr></cr></password></name></code>	
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>	

4.27. AT+SOCKA

Parameter	Description	Default Value	Range	
<protocol></protocol>	Network protocol	TCP	TCP/UDP	
<address></address>	Server address	test.usr.cn	IP address: 0.0.0.0-255.255.255.255	
<audress></audress>			Domain name	
<port></port>	Server port	2317	1-65535	
Format				
Query	AT+SOCKA <cr></cr>			
Return	<cr><lf>+SOCKA:<protocol>,<address>,<port><cr><lf><cr><lf>OK<cr< td=""></cr<></lf></cr></lf></cr></port></address></protocol></lf></cr>			
Ketuili	> <lf></lf>			
Set	AT+SOCKA= <protocol>,<address>,<port><cr></cr></port></address></protocol>			
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>			

4.28. AT+SOCKB

Parameter	Description	Default Value	Range	
<protocol></protocol>	Network protocol	ТСР	TCP/UDP	
<address></address>	Server address		IP address: 0.0.0.0-255.255.255.255	
<address></address>	Server address	test.usr.cn	Domain name	
<port></port>	Server port 2317 1-65535			
		Format		
Query	AT+SOCKB <cr></cr>			
CR> <lf>+SOCKB:<protocol>,<address>,<port><cr><lf><cr><lf></lf></cr></lf></cr></port></address></protocol></lf>		ss>, <port><cr><lf><cr><lf>OK<cr< td=""></cr<></lf></cr></lf></cr></port>		
Return	> <lf></lf>			
Set	AT+SOCKB= <protocol>,<address>,<port><cr></cr></port></address></protocol>			
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>			

4.29. AT+SOCKAEN

Parameter	Description	Default Value	Range
<status></status>	Status of socket A	ON	ON/OFF



Format		
Query	AT+SOCKAEN <cr></cr>	
Return	<cr><lf>+SOCKAEN:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>	
Set	AT+SOCKAEN= <status><cr></cr></status>	
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>	

4.30. AT+SOCKBEN

Parameter	Description	Default Value	Range
<status></status>	Status of socket B	OFF	ON/OFF
Format			
Query	AT+SOCKBEN <cr></cr>		
Return	<cr><lf>+SOCKBEN:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>		
Set	AT+SOCKBEN= <status><cr></cr></status>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.31. AT+SOCKASL

Parameter	Description	Default Value	Range
<type></type>	Connection type of socket A in TCP mode	Long	Short/Long
	Format		
Query	AT+SOCKASL <cr></cr>		
Return	<cr><lf>+SOCKASL:<type><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></type></lf></cr>		
Set	AT+SOCKASL= <type><cr></cr></type>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.32. AT+SOCKBSL

Parameter	Description	Default Value	Range
<type></type>	Connection type of socket B in TCP mode	Long	Short/Long
Format			
Query	AT+SOCKBSL <cr></cr>		
Return	<cr><lf>+SOCKBSL:<type><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></type></lf></cr>		
Set	AT+SOCKBSL= <type><cr></cr></type>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.33. AT+SOCKALK

Parameter	Description	Range



<status></status>	Connection status of socket A	connected/disconnected	
Format			
Query	AT+SOCKALK <cr></cr>		
Return	<cr><lf>+SOCKALK:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>		

4.34. AT+SOCKBLK

Parameter	Description	Range	
<status></status>	Connection status of socket B connected/disconnected		
Format			
Query	AT+SOCKBLK <cr></cr>		
Return	<cr><lf>+SOCKBLK:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>		

4.35. AT+SOCKIDEN

Parameter	Description	Default Value	Range
<status></status>	Status of displaying socket ID function	OFF	ON/OFF
Format			
Query	AT+SOCKIDEN <cr></cr>		
Return	<cr><lf>+SOCKIDEN:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>		
Set	AT+SOCKIDEN= <status><cr></cr></status>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.36. AT+REGEN

Parameter	Description	Default Value	Range
<status></status>	Status of identity packet function	OFF	ON/OFF
	Format		
Query	AT+REGEN <cr></cr>		
Return	<cr><lf>+REGEN:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>		
Set	AT+REGEN= <status><cr></cr></status>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.37. AT+REGTP

Parameter	Description	Default Value	Range	
	<type> Type of Identity packet</type>	T	(1	ICCID: ICCID code
<type></type>		ICCID	IMEI: IMEI code	
			REGID: Registration ID	



		REGDT: User editable data
	Format	
Query	AT+REGT	P <cr></cr>
Return	<cr><lf>+REGTP:<type><cr></cr></type></lf></cr>	<lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf>
Set	AT+REGTP= <type><cr></cr></type>	
Return	<cr><lf>0K<cr><lf></lf></cr></lf></cr>	

4.38. AT+REGID

Parameter	Description	Default Value	
<id></id>	Registration ID	100	
Format			
Query		AT+REGID <cr></cr>	
Return	<cr><lf>+REGID:<id><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></id></lf></cr>		
Set	A	AT+REGID= <id><cr></cr></id>	
Return	<(<cr><lf>OK<cr><lf></lf></cr></lf></cr>	

4.39. AT+REGDT

Parameter	Description	Default Value	Range
<data></data>	User editable	777777777777777777777777	Less than 80 bytes
<data></data>	identity packet data	7777772E7573722E63	Less than 80 bytes
Format			
Query	AT+REGDT <cr></cr>		
Return	<cr><lf>+REGDT:<data><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></data></lf></cr>		
Set	AT+REGDT= <data><cr></cr></data>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.40. AT+REGSND

Parameter	Description	Default Value	Range
	Identity packet sending method		link: Sending identity packet before
			first package after establishing
			connection
<type></type>		link	data: Sending Identity packet in every
			package.
			link&data: Supporting above two
			methods
Format			
Query	AT+REGSND <cr></cr>		



Return	<cr><lf>+REGSND:<type><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></type></lf></cr>	
Set	AT+REGSND= <type><cr></cr></type>	
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>	

4.41. AT+HEARTEN

Parameter	Description	Default Value	Range
<status></status>	Status of heartbeat packet function	ON	ON/OFF
	Format		
Query	AT+HEARTEN <cr></cr>		
Return	<cr><lf>+HEARTEN:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>		
Set	AT+HEARTEN= <status><cr></cr></status>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.42. AT+HEARTDT

Parameter	Description	Default Value	Range	
<data></data>	Heartbeat packet data	7777772E7573722E63	Less than 40 bytes	
	Format			
Query	AT+HEARTDT <cr></cr>			
Return	<cr><lf>+HEARTDT:<data><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></data></lf></cr>			
Set	AT+HEARTDT= <data><cr></cr></data>			
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>			

4.43. AT+HEARTTP

Parameter	Description	Default Value	Range
Tunos	Heartbeat packet	MET	COM: Sending to serial side
<type></type>	sending method	NET	NET: Sending to network side
Format			
Query	AT+HEARTTP <cr></cr>		
Return	<cr><lf>+HEARTTP:<type><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></type></lf></cr>		
Set	AT+HEARTTP= <type><cr></cr></type>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.44. AT+HEARTTM

Parameter	Description	Default Value	Range
<time></time>	Heartbeat packet interval	30s	1-65535s



Format		
Query	AT+HEARTTM <cr></cr>	
Return	<cr><lf>+HEARTTM:<time><cr><lf>CR><lf>OK<cr><lf></lf></cr></lf></lf></cr></time></lf></cr>	
Set	AT+HEARTTM= <time><cr></cr></time>	
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>	

4.45. AT+HTPTP

Parameter	Description	Default Value	Range
<type></type>	HTTP requesting method	GET	GET/POST
	Format		
Query	AT+HTPTP <cr></cr>		
Return	<cr><lf>+HTPTP:<type><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></type></lf></cr>		
Set	AT+HTPTP= <type><cr></cr></type>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.46. AT+HTPURL

Parameter	Description	Default Value	
<url></url>	HTTP URL	/1.php?	
	Format		
Query	AT+HTF	AT+HTPURL <cr></cr>	
Return	<cr><lf>+HTPURL:<url><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></url></lf></cr>		
Set	AT+HTPURI	AT+HTPURL= <url><cr></cr></url>	
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.47. AT+HTPSV

Parameter	Description	Default Value	Range
<address></address>	Server address	tost use an	IP address: 0.0.0.0-255.255.255.255
<auuress></auuress>		test.usr.cn	Domain name
<port></port>	Server port	80	1-65535
	Format		
Query	AT+HTPSV <cr></cr>		
Return	<cr><lf>+HTPSV:<address>,<port><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></port></address></lf></cr>		
Set	AT+HTPSV= <address>,<port><cr></cr></port></address>		
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		



4.48. AT+HTPHD

Parameter	Description	Default Value		
<head></head>	HTTP header data	Accept:text/html[0D][0A]		
Format				
Query	АТ+НТРНІ	AT+HTPHD <cr></cr>		
Return	<cr><lf>+HTPHD:<head><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></head></lf></cr>			
Set	AT+HTPHD= <head><cr></cr></head>			
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>			

4.49. AT+HTPPK

Parameter	Description	Default Value	Range
<status></status>	Status of filtering HTTP header	ON	ON/OFF
<status></status>	of response data	ON	
	Format		
Query	AT+HTPPK <cr></cr>		
Return	<cr><lf>+HTPPK:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>		
Set	AT+HTPPK= <status><cr></cr></status>		
Return:	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.50. AT+DSTNUM

Parameter	Description	
<number></number>	Target phone number in SMS transparent transmission mode	
	Format	
Query	AT+DSTNUM <cr></cr>	
Return	<cr><lf>+DSTNUM:<number><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></number></lf></cr>	
Set	AT+DSTNUM= <number><cr></cr></number>	
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>	

4.51. AT+SMSEND

Parameter	Description	Range
<nunber></nunber>	Target phone number	
		1: ASCII coding, have compression
<type></type>	Coding scheme	2: 8 bits coding, no compression
		3: UCS2 coding
<data></data>	Message data	



Format		
Query	AT+SMSEND <cr></cr>	
Dotum	<cr><lf>+SMSEND:<nunber>,<type>,<data><cr><lf><cr><lf>OK<cr><</cr></lf></cr></lf></cr></data></type></nunber></lf></cr>	
Return	LF>	
Set	AT+SMSEND= <nunber>,<type>,<data><cr></cr></data></type></nunber>	
Return	<cr><lf>OK<cr><lf></lf></cr></lf></cr>	

4.52. AT+CLOUDEN

Parameter	Description Default Value Range		
<status></status>	Status of USR Cloud function	OFF	ON/OFF
	Format		
Query	AT+CLOUDEN <cr></cr>		
Return	<cr><lf>+CLOUDEN:<status><cr><lf>CR><lf>OK<cr><lf></lf></cr></lf></lf></cr></status></lf></cr>		
Set	AT+CLOUDEN= <status><cr></cr></status>		
Return:	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.53. AT+CLOUDID

Parameter	Description Range			
<id></id>	USR Cloud ID	20 bytes		
	Format	Format		
Query	AT+CLOUDID <cr></cr>			
Return	<cr><lf>+CLOUDID:<id><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></id></lf></cr>			
Set	AT+CLOUDID= <id><cr></cr></id>			
Return:	<cr><lf>OK<cr><lf></lf></cr></lf></cr>			

4.54. AT+CLOUDPA

Parameter	Description Range			
<password></password>	USR Cloud password 8 bytes			
	Format	Format		
Query	AT+CLOUDPA <cr></cr>			
Return	<cr><lf>+CLOUDPA:<password><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></password></lf></cr>			
Set	AT+CLOUDPA= <password><cr></cr></password>			
Return:	<cr><lf>0K<cr><lf></lf></cr></lf></cr>			



4.55. AT+LBS

Parameter	Description	
<lac></lac>	Location code	
<cid></cid>	Base station code	
Format		
Query	ery AT+LBS <cr></cr>	
Return	<cr><lf>+LBS:<lac>,<cid><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></cid></lac></lf></cr>	

4.56. AT+GPIO1

Parameter	Description	Default Value	Range
<status></status>	Status of GPIO1(UART2_RTS of	0	1: high level
<status></status>	module)	U	0: low level
	Format		
Query	AT+GPIO1 <cr></cr>		
Return	<cr><lf>+GPIO1:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>		
Set	AT+GPIO1= <status><cr></cr></status>		
Return:	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.57. AT+GPIO2

Parameter	Description	Default Value	Range
<status></status>	Status of GPIO2(I2C_SCL of	1	1: high level
<status></status>	module)		0: low level
	Fort	nat	
Query	AT+GPIO2 <cr></cr>		
Return	<cr><lf>+GPIO2:<status><cr><lf><cr><lf>OK<cr><lf></lf></cr></lf></cr></lf></cr></status></lf></cr>		
Set	AT+GPIO2= <status><cr></cr></status>		
Return:	<cr><lf>OK<cr><lf></lf></cr></lf></cr>		

4.58. AT+CSQ?

Parameter	Description	
<rssi></rssi>	RSSI of module	
	Format	
Query	AT+CSQ? <cr></cr>	
Return	<cr><lf>+CSQ:<rssi><cr><lf><cr><lf>0K<cr><lf></lf></cr></lf></cr></lf></cr></rssi></lf></cr>	



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7. Update History

- 2017-6-26 V1.0.0 created. Based on firmware version V2.2.0.
- 2017-10-25 V1.0.1 updated. Based on firmware version V2.2.0. Added a new command AT+CSQ?. Modified some words to standards and corrected spelling/grammatical mistakes. Optimized whole manual arrangement.
- V1.0.2 updated. Modified **2. How to use the AT command**(Add **2.2. Transparent transmission AT command mode** and **2.3. SMS AT command mode**). Updated web page link. Modified some words to standard terms. Corrected grammar mistakes. Optimized whole manual format.