

# USR-GM3 AT Command Set

(Firmware V2.2.0)

File version: 1.0.1

## Content

<b>USR-GM3 AT Command Set.....</b>	<b>1</b>
<b>1. What is the AT command.....</b>	<b>4</b>
<b>2. How to use the AT command.....</b>	<b>4</b>
<b>2.1. How to enter AT command mode.....</b>	<b>4</b>
<b>3. AT command set.....</b>	<b>4</b>
<b>4. AT command details.....</b>	<b>6</b>
<b>4.1. AT+H.....</b>	<b>6</b>
<b>4.2. AT+Z.....</b>	<b>6</b>
<b>4.3. AT+E.....</b>	<b>7</b>
<b>4.4. AT+ENTM.....</b>	<b>7</b>
<b>4.5. AT+WKMOD.....</b>	<b>7</b>
<b>4.6. AT+CALEN.....</b>	<b>7</b>
<b>4.7. AT+NATEN.....</b>	<b>8</b>
<b>4.8. AT+UATEN.....</b>	<b>8</b>
<b>4.9. AT+CMDPW.....</b>	<b>8</b>
<b>4.10. AT+CACHEN.....</b>	<b>9</b>
<b>4.11. AT+STMSG.....</b>	<b>9</b>
<b>4.12. AT+RSTIM.....</b>	<b>9</b>
<b>4.13. AT+SLEEP.....</b>	<b>9</b>
<b>4.14. AT+SLEEPTIM.....</b>	<b>10</b>
<b>4.15. AT+S.....</b>	<b>10</b>
<b>4.16. AT+RELD.....</b>	<b>10</b>
<b>4.17. AT+CLEAR.....</b>	<b>10</b>
<b>4.18. AT+CFGTF.....</b>	<b>11</b>
<b>4.19. AT+VER.....</b>	<b>11</b>
<b>4.20. AT+SN.....</b>	<b>11</b>
<b>4.21. AT+ICCID.....</b>	<b>11</b>
<b>4.22. AT+IMEI.....</b>	<b>11</b>
<b>4.23. AT+CNUM.....</b>	<b>12</b>
<b>4.24. AT+UART.....</b>	<b>12</b>
<b>4.25. AT+RFCEN.....</b>	<b>12</b>
<b>4.26. AT+APN.....</b>	<b>13</b>
<b>4.27. AT+SOCKA.....</b>	<b>13</b>
<b>4.28. AT+SOCKB.....</b>	<b>13</b>
<b>4.29. AT+SOCKAEN.....</b>	<b>14</b>
<b>4.30. AT+SOCKBEN.....</b>	<b>14</b>
<b>4.31. AT+SOCKASL.....</b>	<b>14</b>
<b>4.32. AT+SOCKBSL.....</b>	<b>15</b>
<b>4.33. AT+SOCKALK.....</b>	<b>15</b>
<b>4.34. AT+SOCKBLK.....</b>	<b>15</b>
<b>4.35. AT+SOCKIDEN.....</b>	<b>15</b>

<b>4.36. AT+REGEN.....</b>	<b>16</b>
<b>4.37. AT+REGTP.....</b>	<b>16</b>
<b>4.38. AT+REGID.....</b>	<b>16</b>
<b>4.39. AT+REGDT.....</b>	<b>17</b>
<b>4.40. AT+REGSND.....</b>	<b>17</b>
<b>4.41. AT+HEARTEN.....</b>	<b>17</b>
<b>4.42. AT+HEARTDT.....</b>	<b>18</b>
<b>4.43. AT+HEARTTP.....</b>	<b>18</b>
<b>4.44. AT+HEARTTM.....</b>	<b>18</b>
<b>4.45. AT+HTPTP.....</b>	<b>18</b>
<b>4.46. AT+HTPURL.....</b>	<b>19</b>
<b>4.47. AT+HTPSV.....</b>	<b>19</b>
<b>4.48. AT+HTPHD.....</b>	<b>19</b>
<b>4.49. AT+HTPPK.....</b>	<b>20</b>
<b>4.50. AT+DSTNUM.....</b>	<b>20</b>
<b>4.51. AT+SMSEND.....</b>	<b>20</b>
<b>4.52. AT+CLOUDEN.....</b>	<b>21</b>
<b>4.53. AT+CLOUDID.....</b>	<b>21</b>
<b>4.54. AT+CLOUDPA.....</b>	<b>21</b>
<b>4.55. AT+LBS.....</b>	<b>22</b>
<b>4.56. AT+GPIO1.....</b>	<b>22</b>
<b>4.57. AT+GPIO2.....</b>	<b>22</b>
<b>4.58. AT+CSQ?.....</b>	<b>22</b>
<b>5. Contact.....</b>	<b>24</b>
<b>6. Disclaimer.....</b>	<b>24</b>
<b>7. Update History.....</b>	<b>24</b>

## 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 AT command mode

Please read this FAQ about entering AT command mode.

<http://www.usriot.com/enter-serial-command-mode/>

## 3. AT command set

Command	Function
Management Command	
<b>H</b>	Query help message
<b>Z</b>	Reset the module
<b>E</b>	Query/Set AT command echo function enable/disable
<b>ENTM</b>	Exit serial AT command mode and enter work mode
<b>WKMOD</b>	Query/Set work mode of module
<b>CALEN</b>	Query/Set Phone function enable/disable
<b>NATEN</b>	Query/Set network AT command enable/disable
<b>UATEN</b>	Query/Set serial port AT command in transparent transmission mode enable/disable
<b>CMDPW</b>	Query/Set transparent AT command and SMS AT command password
<b>CACHEN</b>	Query/Set Cache Data function enable/disable
<b>STMSG</b>	Query/Set Welcome message of module
<b>RSTIM</b>	Query/Set timeout reset function time
<b>SLEEP</b>	Query/Set Sleep mode enable/disable
<b>SLEPTIM</b>	Query/Set time to enter Sleep mode
<b>S</b>	Saving current settings

<b>RELD</b>	Restore default settings
<b>CLEAR</b>	Restore factory settings
<b>CFGTF</b>	Saving current settings as default settings
<b>VER</b>	Query firmware version
<b>SN</b>	Query SN code
<b>ICCID</b>	Query ICCID code
<b>IMEI</b>	Query IMEI code
<b>CNUM</b>	Query phone number
<b>Serial port and socket command</b>	
<b>UART</b>	Query/Set serial port parameters
<b>RFCEN</b>	Query/Set baud rate synchronization function enable/disable
<b>APN</b>	Query/Set APN parameters
<b>SOCKA</b>	Query/Set socket A parameters
<b>SOCKB</b>	Query/Set socket B parameters
<b>SOCKAEN</b>	Query/Set socket A enable/disable
<b>SOCKBEN</b>	Query/Set socket B enable/disable
<b>SOCKASL</b>	Query/Set socket A connection type in TCP mode
<b>SOCKBSL</b>	Query/Set socket B connection type in TCP mode
<b>SOCKALK</b>	Query socket A connection status
<b>SOCKBLK</b>	Query socket B connection status
<b>SOCKIDEN</b>	Query/Set displaying socket ID function enable/disable
<b>Identity packet command</b>	
<b>REGEN</b>	Query/Set identity packet enable/disable
<b>REGTP</b>	Query/Set identity packet type
<b>REGID</b>	Query/Set registration ID
<b>REGDT</b>	Query/Set user editable identity packet data
<b>REGSND</b>	Query/Set identity packet sending method
<b>Heartbeat packet command</b>	
<b>HEARTEN</b>	Query/Set heartbeat packet enable/disable
<b>HEARTDT</b>	Query/Set user editable heartbeat packet data
<b>HEARTTP</b>	Query/Set type of heartbeat packet
<b>HEARTTM</b>	Query/Set heartbeat packet interval
<b>HTTPD Client mode command</b>	
<b>HTPTP</b>	Query/Set HTTP requesting method in HTTPD Client mode
<b>HTPURL</b>	Query/Set HTTP URL in HTTPD Client mode
<b>HTPSV</b>	Query/Set HTTP server address and port in HTTPD Client mode
<b>HTPHD</b>	Query/Set HTTP header in HTTPD Client mode
<b>HTPPK</b>	Query/Set filtering HTTP header of response data enable/disable in HTTPD Client mode
<b>SMS transparent transmission mode command</b>	

<b>DSTNUM</b>	Query/Set Target phone number of message
<b>SMSSEND</b>	Sending message
<b>USR Cloud command</b>	
<b>CLOUDEN</b>	Query/Set USR Cloud enable/disable
<b>CLOUDID</b>	Query/Set USR Cloud ID of module
<b>CLOUDPA</b>	Query/Set USR Cloud password of module
<b>Other command</b>	
<b>LBS</b>	Query LBS information
<b>GPIO1</b>	Query/Set status of GPIO1(UART2_RTS of module)
<b>GPIO2</b>	Query/Set status of GPIO2(I2C_SCL of module)
<b>CSQ?</b>	Query RSSI

## 4.AT command details

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

### 4.1.AT+H

Format	
Query	AT+H<CR>
Return	<CR><LF><HELP MESSAGE><CR><LF><CR><LF>OK<CR><LF>

### 4.2.AT+Z

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

## 4.3.AT+E

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

## 4.4.AT+ENTM

<b>Format</b>	
Set	AT+ENTM<CR>
Return	<CR><LF>OK<CR><LF>

## 4.5.AT+WKMOD

Parameter	Description	Default Value	Range
<Mode>	Work mode of module	“NET”	“CMD”: AT command mode
			“SMS”: SMS transparent transmission mode
			“NET”: Network transparent transmission mode
			“HTTPD”: HTTPD Client mode
Format			
Query	AT+WKMOD<CR>		
Return	<CR><LF>+WKMOD:<Mode><CR><LF><CR><LF>OK<CR><LF>		
Set	AT+WKMOD=<Mode><CR>		
Return	<CR><LF>OK<CR><LF>		

## 4.6.AT+CALEN

Parameter	Description	Default Value	Range
<Status>	Status of Phone Function	OFF	ON/OFF

Format	
Query	AT+CALEN<CR>
Return	<CR><LF>+CALEN:<Status><CR><LF><CR><LF>OK<CR><LF>
Set	AT+CALEN=<Status><CR>
Return	<CR><LF>OK<CR><LF>

## 4.7.AT+NATEN

Parameter	Description	Default Value	Range
<Status>	Status of network AT command	ON	ON/OFF
Format			
Query	AT+NATEN<CR>		
Return	<CR><LF>+NATEN:<Status><CR><LF><CR><LF>OK<CR><LF>		
Set	AT+NATEN=<Status><CR>		
Return	<CR><LF>OK<CR><LF>		

## 4.8.AT+UATEN

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

## 4.9.AT+CMDPW

Parameter	Default Value	Range
<Password>	"usr.cn"	Less than 6 bytes
Format		
Query	AT+CMDPW<CR>	
Return	<CR><LF>+CMDPW:<Password><CR><LF><CR><LF>OK<CR><LF>	
Set	AT+CMDPW=<Password><CR>	
Return	<CR><LF>OK<CR><LF>	



## 4.10. AT+CACHEN

Parameter	Description	Default Value	Range
<Status>	Status of Cache Data	ON	ON/OFF
Format			
Query	AT+CACHEN<CR>		
Return	<CR><LF>+CACHEN:<Status><CR><LF><CR><LF>OK<CR><LF>		
Set	AT+CACHEN=<Status><CR>		
Return	<CR><LF>OK<CR><LF>		

## 4.11. AT+STMSG

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

## 4.12. AT+RSTIM

Parameter	Description	Default Value	Range
<Time>	Timeout reset function time	1800s	0s: Closing function
Format			
Query	AT+RSTIM<CR>		
Return	<CR><LF>+RSTIM:<Time><CR><LF><CR><LF>OK<CR><LF>		
Set	AT+RSTIM=<Time><CR>		
Return	<CR><LF>OK<CR><LF>		

## 4.13. AT+SLEEP

Parameter	Description	Default Value	Range
<Status>	Status of Sleep mode	OFF	ON/OFF

Format	
Query	AT+SLEEP<CR>
Return	<CR><LF>+SleepMode:<Status><CR><LF><CR><LF>OK<CR><LF>
Set	AT+SLEEP=<Status><CR>
Return	<CR><LF>OK<CR><LF>

## 4.14. AT+SLEEPTIM

Parameter	Description	Default Value	Range
<Time>	Time to enter Sleep mode	0s	0s: Closing function
Format			
Query	AT+SLEEPTIM<CR>		
Return	<CR><LF>+SLEEPTIM:<Time><CR><LF><CR><LF>OK<CR><LF>		
Set	AT+SLEEPTIM=<Time><CR>		
Return	<CR><LF>OK<CR><LF>		

## 4.15. AT+S

Format	
Set	AT+S<CR>
Return	<CR><LF>OK<CR><LF>

## 4.16. AT+RELD

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

## 4.17. AT+CLEAR

Format	
Set	AT+CLEAR<CR>
Return	<CR><LF>OK<CR><LF>

## 4.18. AT+CFGTF

Format	
Set	AT+CFGTF<CR>
Return	<CR><LF>OK<CR><LF>

## 4.19. AT+VER

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

## 4.20. AT+SN

Format	
Query	AT+SN<CR>
Return	<CR><LF>+SN:<SN code><CR><LF><CR><LF>OK<CR><LF>

## 4.21. AT+ICCID

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

## 4.22. AT+IMEI

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

## 4.23. AT+CNUM

Format	
Query	AT+CNUM<CR>
Return	<CR><LF>+CNUM:<Phone Number><CR><LF><CR><LF>OK<CR><LF>

## 4.24. AT+UART

Parameter	Description	Default Value	Range
<Baud rate>	Baud rate	115200	1500, 2400, 4800, 9600, 14400, 19200, 38400, 57600, 115200, 128000, 230400, 460800, 921600
<Data bits>	Data bits	8	7, 8
<Stop bits>	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)
			485: UART_RTS used to 485 communication
Format			
Query	AT+UART<CR>		
Return	<CR><LF>+UART:<Baud rate>,<Parity>,<Data bits>,<Stop bits><Flow Control><CR><LF><CR><LF>OK<CR><LF>		
Set	AT+UART=<Baud rate>,<Parity>,<Data bits>,<Stop bits><Flow Control><CR>		
Return	<CR><LF>OK<CR><LF>		

## 4.25. AT+RFCEN

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

## 4.26. AT+APN

Parameter	Description	Default Value
<Code>	APN code	CMNET
<Name>	User name	No Default Value
<Password>	User password	No Default Value
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>	

## 4.27. AT+SOCKA

Parameter	Description	Default Value	Range
<Protocol>	Network protocol	TCP	TCP/UDP
<Address>	Server address	test.usr.cn	IP address: 0.0.0.0-255.255.255.255
			Domain name
<Port>	Server port	2317	1-65535
Format			
Query	AT+SOCKA<CR>		
Return	<CR><LF>+SOCKA:<Protocol>,<Address>,<Port><CR><LF><CR><LF>OK<CR><LF>		
Set	AT+SOCKA=<Protocol>,<Address>,<Port><CR>		
Return	<CR><LF>OK<CR><LF>		

## 4.28. AT+SOCKB

Parameter	Description	Default Value	Range
<Protocol>	Network protocol	TCP	TCP/UDP
<Address>	Server address	test.usr.cn	IP address: 0.0.0.0-255.255.255.255
			Domain name
<Port>	Server port	2317	1-65535
Format			
Query	AT+SOCKB<CR>		

Return	<CR><LF>+SOCKB:<Protocol>,<Address>,<Port><CR><LF><CR><LF>OK<CR><LF>
Set	AT+SOCKB=<Protocol>,<Address>,<Port><CR>
Return	<CR><LF>OK<CR><LF>

## 4.29. AT+SOCKAEN

Parameter	Description	Default Value	Range
<Status>	Status of socket A	ON	ON/OFF
Format			
Query	AT+SOCKAEN<CR>		
Return	<CR><LF>+SOCKAEN:<Status><CR><LF><CR><LF>OK<CR><LF>		
Set	AT+SOCKAEN=<Status><CR>		
Return	<CR><LF>OK<CR><LF>		

## 4.30. AT+SOCKBEN

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

## 4.31. AT+SOCKASL

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

## 4.32. AT+SOCKBSL

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

## 4.33. AT+SOCKALK

Parameter	Description	Range
<Status>	Connection status of socket A	connected/disconnected
Format		
Query	AT+SOCKALK<CR>	
Return	<CR><LF>+SOCKALK:<Status><CR><LF><CR><LF>OK<CR><LF>	

## 4.34. AT+SOCKBLK

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

## 4.35. AT+SOCKIDEN

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

## 4.36. AT+REGEN

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

## 4.37. AT+REGTP

Parameter	Description	Default Value	Range
<Type>	Type of Identity packet	ICCID	ICCID: ICCID code
			IMEI: IMEI code
			REGID: Registration ID
			REGDT: User editable data
Format			
Query	AT+REGTP<CR>		
Return	<CR><LF>+REGTP:<Type><CR><LF><CR><LF>OK<CR><LF>		
Set	AT+REGTP=<Type><CR>		
Return	<CR><LF>OK<CR><LF>		

## 4.38. AT+REGID

Parameter	Description	Default Value
<ID>	Registration ID	100
Format		
Query	AT+REGID<CR>	
Return	<CR><LF>+REGID:<ID><CR><LF><CR><LF>OK<CR><LF>	
Set	AT+REGID=<ID><CR>	
Return	<CR><LF>OK<CR><LF>	



## 4.39. AT+REGDT

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

## 4.40. AT+REGSND

Parameter	Description	Default Value	Range
<Type>	Identity packet sending method	link	link: Sending identity packet before first package after establishing connection
			data: Sending Identity packet in every package.
			link&data: Supporting above two methods
Format			
Query	AT+REGSND<CR>		
Return	<CR><LF>+REGSND:<Type><CR><LF><CR><LF>OK<CR><LF>		
Set	AT+REGSND=<Type><CR>		
Return	<CR><LF>OK<CR><LF>		

## 4.41. AT+HEARTEN

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

## 4.42. AT+HEARTDT

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

## 4.43. AT+HEARTTP

Parameter	Description	Default Value	Range
<Type>	Heartbeat packet sending method	NET	COM: Sending to serial side
			NET: Sending to network side
Format			
Query	AT+HEARTTP<CR>		
Return	<CR><LF>+HEARTTP:<Type><CR><LF><CR><LF>OK<CR><LF>		
Set	AT+HEARTTP=<Type><CR>		
Return	<CR><LF>OK<CR><LF>		

## 4.44. AT+HEARTTM

Parameter	Description	Default Value	Range
<Time>	Heartbeat packet interval	30s	1-65535s
Format			
Query	AT+HEARTTM<CR>		
Return	<CR><LF>+HEARTTM:<Time><CR><LF><CR><LF>OK<CR><LF>		
Set	AT+HEARTTM=<Time><CR>		
Return	<CR><LF>OK<CR><LF>		

## 4.45. AT+HTPTP

Parameter	Description	Default Value	Range
<Type>	HTTP requesting method	GET	GET/POST

Format	
Query	AT+HTPTP<CR>
Return	<CR><LF>+HTPTP:<Type><CR><LF><CR><LF>OK<CR><LF>
Set	AT+HTPTP=<Type><CR>
Return	<CR><LF>OK<CR><LF>

## 4.46. AT+HTPURL

Parameter	Description	Default Value
<URL>	HTTP URL	/1.php?
Format		
Query	AT+HTPURL<CR>	
Return	<CR><LF>+HTPURL:<URL><CR><LF><CR><LF>OK<CR><LF>	
Set	AT+HTPURL=<URL><CR>	
Return	<CR><LF>OK<CR><LF>	

## 4.47. AT+HTPSV

Parameter	Description	Default Value	Range
<Address>	Server address	test.usr.cn	IP address: 0.0.0.0-255.255.255.255
			Domain name
<Port>	Server port	80	1-65535
Format			
Query	AT+HTPSV<CR>		
Return	<CR><LF>+HTPSV:<Address>,<Port><CR><LF><CR><LF>OK<CR><LF>		
Set	AT+HTPSV=<Address>,<Port><CR>		
Return	<CR><LF>OK<CR><LF>		

## 4.48. AT+HTPHD

Parameter	Description	Default Value
<Head>	HTTP header data	Accept:text/html[0D][0A]
Format		
Query	AT+HTPHD<CR>	
Return	<CR><LF>+HTPHD:<Head><CR><LF><CR><LF>OK<CR><LF>	

<b>Set</b>	<b>AT+HTPHD=&lt;Head&gt;&lt;CR&gt;</b>
<b>Return</b>	<b>&lt;CR&gt;&lt;LF&gt;OK&lt;CR&gt;&lt;LF&gt;</b>

#### 4.49. AT+HTPPK

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

#### 4.50. AT+DSTNUM

Parameter	Description
<Number>	Target phone number in SMS transparent transmission mode
<b>Format</b>	
Query	AT+DSTNUM<CR>
Return	<CR><LF>+DSTNUM:<Number><CR><LF><CR><LF>OK<CR><LF>
Set	AT+DSTNUM=<Number><CR>
Return	<CR><LF>OK<CR><LF>

#### 4.51. AT+SMSSEND

Parameter	Description	Range
<Nunber>	Target phone number	
<Type>	Coding scheme	1: ASCII coding, have compression
		2: 8 bits coding, no compression
		3: UCS2 coding
<Data>	Message data	
<b>Format</b>		
Query	AT+SMSSEND<CR>	
Return	<CR><LF>+SMSSEND:<Nunber>,<Type>,<Data><CR><LF><CR><LF>OK<CR><LF>	

<b>Set</b>	<b>AT+SMSSEND=&lt;Nunber&gt;,&lt;Type&gt;,&lt;Data&gt;&lt;CR&gt;</b>
<b>Return</b>	<b>&lt;CR&gt;&lt;LF&gt;OK&lt;CR&gt;&lt;LF&gt;</b>

## 4.52. AT+CLOUDEN

Parameter	Description	Default Value	Range
<Status>	Status of USR Cloud function	OFF	ON/OFF
<b>Format</b>			
<b>Query</b>	<b>AT+CLOUDEN&lt;CR&gt;</b>		
<b>Return</b>	<b>&lt;CR&gt;&lt;LF&gt;+CLOUDEN:&lt;Status&gt;&lt;CR&gt;&lt;LF&gt;&lt;CR&gt;&lt;LF&gt;OK&lt;CR&gt;&lt;LF&gt;</b>		
<b>Set</b>	<b>AT+CLOUDEN=&lt;Status&gt;&lt;CR&gt;</b>		
<b>Return:</b>	<b>&lt;CR&gt;&lt;LF&gt;OK&lt;CR&gt;&lt;LF&gt;</b>		

## 4.53. AT+CLOUDID

Parameter	Description	Range
<ID>	USR Cloud ID	20 bytes
<b>Format</b>		
<b>Query</b>	<b>AT+CLOUDID&lt;CR&gt;</b>	
<b>Return</b>	<b>&lt;CR&gt;&lt;LF&gt;+CLOUDID:&lt;ID&gt;&lt;CR&gt;&lt;LF&gt;&lt;CR&gt;&lt;LF&gt;OK&lt;CR&gt;&lt;LF&gt;</b>	
<b>Set</b>	<b>AT+CLOUDID=&lt;ID&gt;&lt;CR&gt;</b>	
<b>Return:</b>	<b>&lt;CR&gt;&lt;LF&gt;OK&lt;CR&gt;&lt;LF&gt;</b>	

## 4.54. AT+CLOUDPA

Parameter	Description	Range
<Password>	USR Cloud password	8 bytes
<b>Format</b>		
<b>Query</b>	<b>AT+CLOUDPA&lt;CR&gt;</b>	
<b>Return</b>	<b>&lt;CR&gt;&lt;LF&gt;+CLOUDPA:&lt;Password&gt;&lt;CR&gt;&lt;LF&gt;&lt;CR&gt;&lt;LF&gt;OK&lt;CR&gt;&lt;LF&gt;</b>	
<b>Set</b>	<b>AT+CLOUDPA=&lt;Password&gt;&lt;CR&gt;</b>	
<b>Return:</b>	<b>&lt;CR&gt;&lt;LF&gt;OK&lt;CR&gt;&lt;LF&gt;</b>	

## 4.55. AT+LBS

Parameter	Description
<LAC>	Location code
<CID>	Base station code
Format	
Query	AT+LBS<CR>
Return	<CR><LF>+LBS:<LAC>,<CID><CR><LF><CR><LF>OK<CR><LF>

## 4.56. AT+GPIO1

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

## 4.57. AT+GPIO2

Parameter	Description	Default Value	Range
<Status>	Status of GPIO2(I2C_SCL of module)	1	1: high level
			0: low level
Format			
Query	AT+GPIO2<CR>		
Return	<CR><LF>+GPIO2:<Status><CR><LF><CR><LF>OK<CR><LF>		
Set	AT+GPIO2=<Status><CR>		
Return:	<CR><LF>OK<CR><LF>		

## 4.58. AT+CSQ?

Parameter	Description
<RSSI>	RSSI of module

Format	
Query	AT+CSQ?<CR>
Return	<CR><LF>+CSQ:<RSSI><CR><LF><CR><LF>OK<CR><LF>

## 5. Contact

Company: Jinan USR IOT Technology Limited

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

Tel: 86-531-88826739

Web: [www.usriot.com](http://www.usriot.com)

Support: [h.usriot.com](http://h.usriot.com)

Email: [sales@usr.cn](mailto:sales@usr.cn)

## 6. Disclaimer

This document provide the information of USR-GM3 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 merchant-ability 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.

## 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.