

L651G AT instruction

Ver.1.0

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Version.

版本	日期	作者	修订点
1.0	2019/6/24	李勇	The initial version.

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1. Overview.

1.1. Purpose and scope.

This article describes the current GPS-related API interfaces and AT instructions.

1.2. Defined.

Table 1-1 Terminology

Term	Definition
GPS	Global Positioning System (GPS) of the United States.
BDS	China Beidou Navigation Satellite System.
GNSS	GlobalNavigationSatelliteSystem
BAUD	Baud rate
CR	Carriage Return
LF	Line Feed

1.3. Refer to the documentation.

Title	Location
NMEA-0183protocol	
GNSS The data interface protocol.	

2. Relevant AT instructions and functions.

2.1. **at+gps="ON"**

Initialize the GPS chip.

2.2. **at+gps="START",start_mode**

start_mode for positioning mode parameter

0 - hot start, default mode.

1. - Cold start.

2. - Warm start.

2.3. **at+gps="FWINFO"**

Print product information as detailed in 1.8.

2.4. **at+gps="POSMODE",pos_mode**

pos_mode The system used for positioning.

1 - GPS

2 - BDS

3 - BD + GPS

2.5. **at+gps="ASSIST"**

Requesting secondary data currently only supports downloading real-time astrations.

2.6. **at+gps="ASSIST",fix_freq**

The parameter fix_freq is the positioning frequency, and the supported values include 1000ms , 500ms , 200ms , corresponding to 1Hz, 2Hz, 5Hz.

2.7. **at+gps="BAUD",baud_rate**

The parameter baud_rate is the set baud rate. See section 1.9 for the supported baud rate .
The default baud rate is 9600

2.8. **at+gps="NMEA", type, flag, freq**

The value range of the parameter is exactly the same as that of API

um_gps_set_nmea_output in section 3.10 . If you need to set all messages of a certain category at once, you can set the flag parameter to 8 .

such as: at+gps= "NMEA",0, 8, 2

– Change the output frequency of all NMEA messages to once every 3 seconds, corresponding to 0.5 Hz . .

2.9. **at+gps="DEBUG"**

Open debugging mode, FW will output more information, mainly for debugging. Before sending the command, you need to set the baud rate to 115200.

2.10. **at+gps="STOP"**

Stop positioning and enter sleep mode

2.11. **at+gps="OFF"**

Turn off GPS and release resources