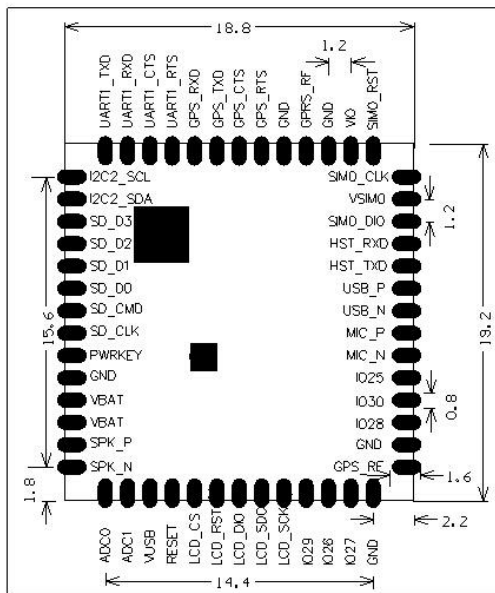


## A9G GPRS/GSM+GPS/BDS Module



### Features

- Complete quad-band GSM / GPRS module, 800/900 / 1800 / 1900MHz
- SMD package for easy MP & testing
- Low power mode, average current 2mA or less
- support GPS, BD.
- Supports digital audio and analog audio, supports HR, FR, EFR, AMR voice coding
- Support voice calls and SMS messages
- Embedded network service protocol stack
- Support standard GSM07.07,07.05AT command and Anxin expandable command set
- Support PBCCH
- Supports firmware upgrade via serial port

### Overview

The A9G is a complete quad-band GSM / GPRS module that combines GPRS and GPS / BDS technologies and integrates it in a compact SMD package, saving customers time and money in developing GNSS applications.

The A9G can be used in a wide range of IoT applications and is ideal for IoT applications for home automation, industrial wireless control, wearable electronics, wireless location sensing devices, wireless location system signals and other IoT applications.

A9G SMD package, through the standard SMT equipment to achieve rapid production of products, especially for automation, large-scale, low-cost modern production methods for the convenience of a variety of Internet of Things hardware terminal applications.

## Product specifications

Model Name	A9G
Package	SMD54
Size	19.2*18.8*2.5(±0.2)mm
Frequency	850/900/1800/1900MHz
GPRS Multi-slot	Class 12
GPRS Mobile Station	Class B
Compatible with GSM Phase 2/2+	Class 4 (2W@850/900MHz) Class 1 (1W@1800/1900MHz)
Power supply	3.5~4.2V typical value 4.0V
Current	1.14mA@DRX=5 1.03mA@DRX=9
AT command	3GPP TS 27.007, 27.005
GPRS Class 12	Max 85.6kbps (up & down)
Coding scheme	CS 1,2, 3, 4
PBCCH	Support
Text	Point to point sms send and receive Cellular broadcast message, Text / PDU mode
Voice coding mode	Half Rate (HR)、Full Rate (FR)、 Enhanced Full Rate (EFR)、 Adaptive Multi-Rate (AMR)
Audio processing mechanism	Echo Cancellation, Echo suppression, Noise suppression
SIM Card	1.8V/3V
UART	3 pcs (including firmware upgrade serial port), baud rate support 2400~1843200bps, default 115200bps
Antenna	Pad (include GSM、GPS)
Communication Interface	I2C、USB、UART、SDMMC、GPIO、ADC
GPS Sensitivity	Cold start: -148 dBm Hot start: -162 dBm Recapture: -164dBm Tracking: -166 dBm
GPS boot time	Cold start < 27.5s Hot start < 1s Recapture < 1s
GPS accuracy	Horizontal positioning accuracy: 2.5m High positioning accuracy: 3.5m
Working temperature	-20°C ~ +75°C
Weight	约 3.0g

## 联系我们

地址：深圳市宝安区航城大道与宝安大道交叉口华丰工业园 C2 栋 6 楼

官网：[www.ai-thinker.com](http://www.ai-thinker.com)

电话：0755-29162996

邮箱：[jane@aithinker.com](mailto:jane@aithinker.com)