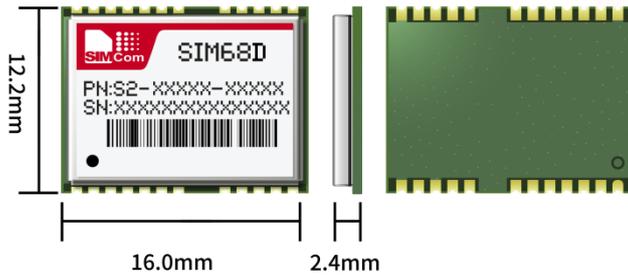


SIM68D

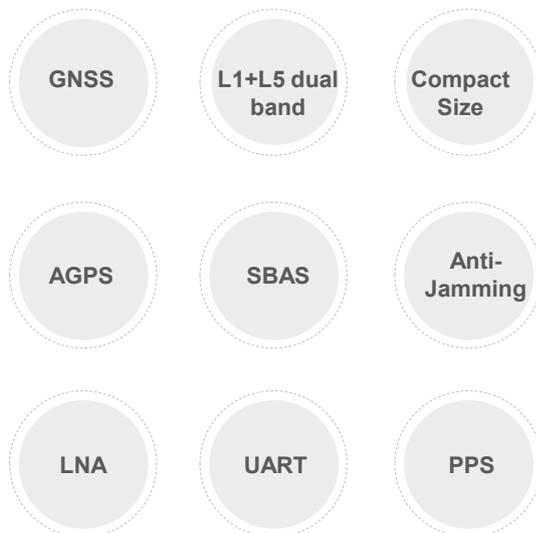
SIMCom GNSS Module



Product Description

SIM68D is a high performance and reliable GNSS module. It is a standalone L1 +L5 dual-band GNSS module in a LCC type with AIROHA's high sensitivity navigation engine, which allows customer to achieve industry's high level sensitivity, accuracy, and Time-to-First-Fix (TTFF) with lower power consumption.

SIM68D provides simultaneous GPS, GLONASS, BeiDou, Galileo and QZSS open service L1 reception capability and GPS, BeiDou, Galileo, Navic and QZSS open service L5 reception capability. SIM68D can acquire and track any mix of multiple satellite signals. Combining advanced AGPS called EASY™ (Embedded Assist System) with proven AlwaysLocate™ technology, SIM68D achieves the highest performance and fully meets the industrial standard.



Key Benefits

- ◆ L1 and L5 dual-band GNSS receiver
- ◆ Support EASY™ self-generated orbit prediction
- ◆ Support EPO™ orbit prediction
- ◆ Support SBAS ranging (WAAS, EGNOS, GAGAN, MSAS)
- ◆ Support Jamming Removing
- ◆ Low-noise amplifier has been integrated

Mechanical data

Dimensions	16*12.2*2.4mm
Weight	1g

Features

Support	L1: BeiDou/GPS/GLONASS/Galileo/QZSS L5: NavIC/BeiDou/GPS/Galileo/QZSS
Support	EASY™ self-generated orbit prediction
Support	EPO™ orbit prediction
Support	SBAS ranging (WAAS, EGNOS, GAGAN, MSAS)
Support	Jamming Removing
Low-noise amplifier	has been integrated
Support	DGPS (RTCM)
Indoor and outdoor	multi-path detection and compensation
LOCUSTM	logger function

Interfaces

	UART
Serial interfaces	SPI
	I2C
Digital I/O	Pulse-per-second (PPS)
	EINT0 input
Protocols	NEMA
	PMTK

Certifications

TBD

Note

1. Demonstrated in lab
2. All SV @ -130 dBm, GPS&GLONASS mode
3. 50% 24 hr static, -130dBm,GPS&GLONASS mode
4. 50% @ 30m/s
5. When at -40°C ~ -30°C, the sensitivity will be somewhat worse
6. @3.3V with a passive antenna

Performance data

Receiver type	L1: 75SVs L5: 60SVs
Max. update rate	10Hz
Sensitivity ¹	
Tracking	TBD
Reacquisition	TBD
Cold starts	TBD
Time-To-First Fix ²	
Cold starts	TBD
Warm start	TBD
Hot starts	TBD
EPO Assist	TBD
Accuracy	
Automatic Position ³	TBD
Speed ⁴	TBD
Operation temperature ⁵	-40°C ~ +85 °C

Electrical data

Power supply	2.8V~4.3V
Backup power	2.3V~4.6V
Power consumption ^{2,6:}	
Acquisition	TBD
Tracking	TBD
AlwaysLocate™	TBD
Backup	TBD
Antenna type	Active and passive
Antenna power	External or internal VCC_RF