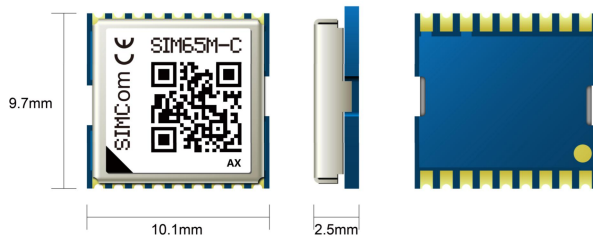


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# SIM65M-C

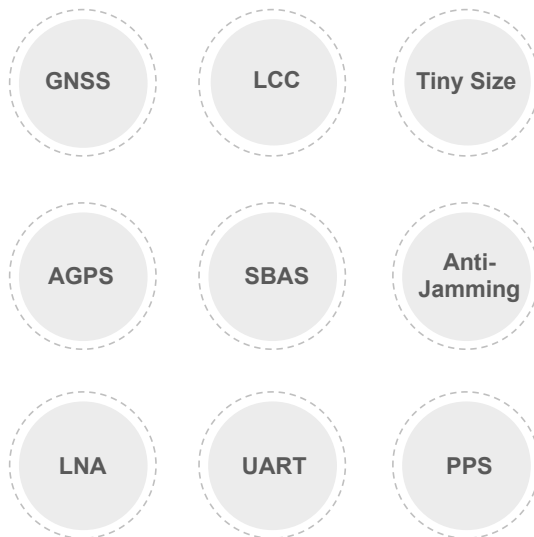
## SIMCom GNSS Module



### Product Description

SIM65M-C is a high performance and reliable GNSS module. It is a GNSS module integrated with GPS & GLONASS

& BDS & Galileo & QZSS system in a LCC type with ICOE's high sensitivity navigation engine, which allows customer to achieve industry's high level sensitivity, accuracy, and Time-to-First-Fix (TTFF).



SIM65M-C provides simultaneous GPS, GLONASS, BDS, Galileo and QZSS open service L1 reception capability. With 64 GNSS receiver channels, SIM65M-C can acquire and track any mix of multiple satellite signals. SIM65M-C achieves the highest performance and fully meets the industrial standard.

### Key Benefits

- ◆ Support SBAS ranging (WAAS, EGNOS, GAGAN, MSAS)
- ◆ Support Jamming detection
- ◆ Low-noise amplifier has been integrated

## Mechanical data

Dimensions	10.1*9.7*2.5mm
Weight	0.5g

## Features

Support GPS/GLONASS/BDS/Galileo/QZSS  
(L1 Band Receiver 1575.42MHz)

Support SBAS ranging  
(WAAS, EGNOS, GAGAN, MSAS)

Support Jamming Detection

Low-noise amplifier has been integrated

## Interfaces

Serial interfaces	UART
Digital I/O	Pulse-per-second (PPS) EINT0 input
Protocols	NMEA

## Certifications

CE

RoHS/REACH

## Performance data

Receiver type 64channels GNSS receiver

Max. update rate 5Hz

Sensitivity<sup>1</sup>

Tracking -165dBm

Reacquisition -159dBm

Cold starts -149dBm

Time-To-First Fix<sup>2</sup>

Cold starts 20s

Hot starts 1s

EPO Assist 3.5s

Accuracy

Automatic Position<sup>3</sup> 2M

Speed<sup>4</sup> 0.1m/s

Operation temperature<sup>5</sup> -40°C~+85 °C

## Electrical data

	SIM65M-C(A0)	SIM65M-C-DCDC(A1)
Power supply	1.7V~3.6V	1.7V~3.6V
Backup power	1.7V~3.6V	1.7V~3.6V
Power consumption <sup>2,6</sup>		
Acquisition	47mA	18mA
Tracking	33mA	14mA
IDLE current	10mA	10mA
Backup	21uA	21uA
Antenna type	Active and passive	
Antenna power	External or internal VCC_RF	

### Note

1. Demonstrated in lab
2. All SV @ -130 dBm, GPS&GLONASS@BDS@Galileo mode
3. 50% 24 hr static, -130dBm, GPS&GLONASS@BDS@Galileo 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