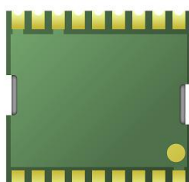


SIM66MD

SIMCom GNSS Module



GNSS

L1+L5 dual
band

Compact
Size

AGNSS

SBAS

LNA

PPS

UART

RTK*

Product Description

SIM66MD is a high performance and reliable GNSS module. It is a standalone L1 +L5 dual-band GNSS module in a LCC, which allows customer to achieve industry's high level sensitivity, accuracy, and Time-to-First-Fix (TTFF) with lower power consumption.

SIM66MD provides simultaneous GPS, GLONASS, BeiDou , Galileo QZSS open service L1 reception capability and GPS, BeiDou, Galileo, QZSS and NAVIC open service L5 reception capability. SIM66MD can acquire and track any mix of multiple satellite signals. SIM66MD achieves the highest performance and fully meets the industrial standard.

Key Benefits

- ◆ L1 and L5 dual-band GNSS receiver
- ◆ Support AGNSS
- ◆ Low-noise amplifier has been integrated
- ◆ Support RTK *

Mechanical data

Dimensions	10.1*9.7*2.4mm
Weight	0.5g

Features

Support	L1: BeiDou/GPS/GLONASS/Galileo/QZSS L5: BeiDou/GPS/Galileo/QZSS/NAVIC*
Support AGNSS	
Support PPS	
Low-noise amplifier has been integrated	
Support DGPS (RTCM)/RTK*	
Indoor and outdoor multi-path detection and compensation	

Interfaces

Serial interfaces	UART
	SPI
	I2C
Digital I/O	Pulse-per-second (PPS)
	EINT0 input
Protocols	NMEA
	RTCM*

Certifications (plan)

CE
RoHS/Reach

Performance data

Receiver type	L1: 75SVs L5: 60SVs
Max. update rate	10Hz
Sensitivity	
Tracking	-165dBm
Reacquisition	-155dBm
Cold starts	-148dBm
Time-To-First Fix	
Cold starts	24s
Warm start	19s
Hot starts	<1s
Accuracy	
Automatic Position	0.5M
Speed ⁴	0.01m/s
Operation temperature	-40°C~+85 °C

Electrical data

Power supply	1.7V~3.6V
Power consumption	
Acquisition	25mA
Tracking	25mA
Sleep current	TBD
Software RTC current	TBD
Antenna type	Active and passive
Antenna power	External or internal VCC_RF

Note

*: optional