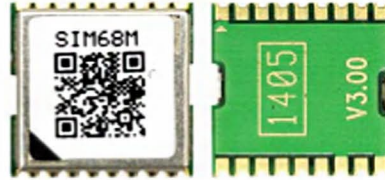


SIM68M



SIMCom presents a high performance and reliable GNSS module - SIM68M. This is a GNSS module integrated with GPS and GLONASS system in a SMT type with MTK's high sensitivity navigation engine, which allows customers to achieve industry high level sensitivity, accuracy, and Time-to-First-Fix (TTFF) with lower power consumption.

Product Specifications

Mechanical Data

Dimensions: 10.1 x 9.7 x 2.5mm

Weight: 0.5g

Features

- Supports GPS / GLONASS / Galileo / QZSS
- Supports EASY™ self-generated orbit prediction
- Supports EPO™ orbit prediction
- Supports SBAS ranging (WAAS, EGNOS, GAGAN, MSAS)
- Supports Jamming Detection
- Low-noise amplifier has been integrated

Interfaces

- Serial Interface: UART
- Digital I/O: EINT0 input ; Pulse-per-second (PPS)
- Protocols: NMEA; PMTK

Support Product

- SIM68 EVB KIT with USB V2.0 full speed interface

Performance Data

Receiver Type: 33tracking / 99 acquisition channel

GNSS receiver

Max update rate: 10Hz

Sensitivity:

- Tracking: -165dBm
- Reacquisition: -160dBm
- Cold Starts: -148dBm

Time-to-First-Fix:

- Cold Starts: 28s
- Warm Starts: 26s
- Hot Starts: <1s
- EPO Assist: 13s (CTTFF)

Accuracy:

- Automatic Position: <2.5m CEP
- Speed: 0.1m/s

Operation Temperature: -40°C ~ +85°C

Electrical Data

Power Supply: 2.8V ~ 4.3V ; Backup Power: 2.3V ~ 4.6V

Power Consumption:

- Acquisition: 25mA
- Tracking: 21mA
- AlwaysLocate™: 340uA
- Backup: 14uA

Antenna Type: Active and Passive

Antenna Power: External or Internal VCC_RF