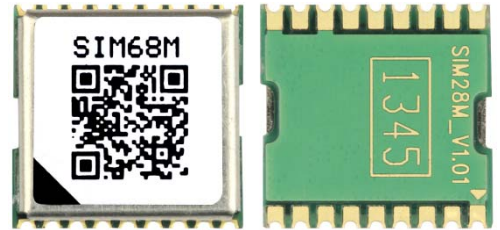




# GNSS Module



## SIM68M

SIMCom presents a high performance and reliable GNSS module-SIM68M. This is GNSS module integrated with GPS & GLONASS system in a SMT type with MTK'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.

## Smart Machine Smart Decision

### Mechanical data

- Dimensions: 10.1\*9.7\*2.5mm
- Weight: 0.5g

### Features

- Support GPS/GLONASS/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

### Interfaces

- Serial interfaces      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<sup>1</sup>
  - Tracking:                -165 dBm
  - Reacquisition:        -160 dBm
  - Cold starts:            -148 dBm
- Time-To-First-Fix<sup>2</sup>
  - Cold starts:            28 s
  - Warm start:            26 s
  - Hot starts:             <1s
  - EPO Assist:            13s (CTTFF)
- Accuracy
  - Automatic Position<sup>3</sup>: <2.5m CEP
  - Speed<sup>4</sup>:                0.1m/s
- Operation temperature<sup>5</sup>: -40°C~+85 °C

### Electrical data

- Power supply            2.8V~4.3V
- Backup power            2.3V~4.6V
- Power consumption<sup>2,6</sup>
  - Acquisition            25mA
  - Tracking                18mA
  - AlwaysLocate™        340uA
  - Backup                 14uA
- Antenna type            Active and passive
- Antenna power         External or internal VCC\_RF

- 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. @2.8V with a passive antenna

Distributed by:



More about SIMCom SIM68M  
Please contact:  
Tel: 86-21-32523300  
Fax: 86-21-32523301  
Email: [simcom@sim.com](mailto:simcom@sim.com)  
Website: [www.sim.com](http://www.sim.com)

# TEXIM EUROPE

Partner in Electronic Components & Supply Chain Solutions



## The Netherlands

Elektrostraat 17  
NL-7483 PG Haaksbergen  
Tel: +31 (0)53 573 33 33  
Fax: +31 (0)53 573 33 30  
nl@texim-europe.com



## Denmark

Nørregade 15  
DK-9240 Nibe  
Tel: +45 88 20 26 30  
Fax: +45 88 20 26 39  
nordic@texim-europe.com



## Belgium

Gentsesteenweg 1154-C22  
Chaussée de Gand 1154-C22  
B-1082 Brussel / Bruxelles  
Tel: +32 (0)2 462 01 00  
Fax: +32 (0)2 462 01 25  
belgium@texim-europe.com



## United Kingdom

St. Mary's House, Church Lane  
Carlton Le Moorland  
Lincoln LN5 9HS  
Tel: +44 (0)1522 789 555  
Fax: +44 (0)845 299 22 26  
uk@texim-europe.com



## Germany

Justus-von-Liebig-Ring 7-9  
D-25451 Quickborn  
Tel: +49 (0)4106 627 07-0  
Fax: +49 (0)4106 627 07-20  
germany@texim-europe.com



## Germany

Martin-Kollar-Strasse 9  
D-81829 München  
Tel: +49 (0)89 436 086-0  
Fax: +49 (0)89 436 086-19  
germany@texim-europe.com



## Austria

Warwitzstrasse 9  
A-5020 Salzburg  
Tel: +43 (0)662 216026  
Fax: +43 (0)662 216026-66  
austria@texim-europe.com

## Texim Europe B.V.

Elektrostraat 17  
NL-7483 PG Haaksbergen  
Tel: +31 (0)53 573 33 33  
info@texim-europe.com  
www.texim-europe.com

