







# SIM<sub>28</sub>M

SIMCom presents a small, high performance and reliable assisted GPS module-SIM28M. This is a standalone L1 frequency GPS module in a SMT type and it is designed with MTK high sensitivity navigation engine, which allows you to achieves the industry's highest levels of sensitivity, accuracy, and Time-to-First-Fix (TTFF) with lowest power consumption.

# **Smart Machine Smart Decision**

#### **Mechanical data**

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

#### **Features**

- •Support EASY™ self-generated orbit prediction
- •Support EPO™ orbit prediction
- Support AGPS
- •Support SBAS ranging (WAAS, EGNOS, GAGAN, MSAS)
- •Support Jamming Removing
- •Low-noise amplifier has been integrated

#### Interfaces

•Serial interfaces UART •Digital I/O GPIO

TIMEMARK (PPS)

•Protocols NMEA

**PMTK** 

**PSIM** 

#### **Support product**

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

## Certificate

•CE (in plan)

#### Performance data

•Receiver type: 22 tracking/66 acquisitionchannel GPS receiver

GPS L1. C/A Code

•Max update rate 10Hz

•Sensitivity1

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

•Time-To-First-Fix<sup>2</sup>

Cold starts 32 s (typical)

Warm starts 30s 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 -40°C ~+85 °C

### **Electrical data**

•Power supply
•Backup power
•Power consumption<sup>2,5</sup>

17m△
2.8~4.3V
2.0 V~4.3V
3.3V (typical)

Acquisition 17mA
Tracking 16mA
Backup 8uA

•Antenna type Active and passive

•Antenna power External

1.Demonstrated in liberary

2.All SV @ -130 dBm

3.50% 24 hr static. -130dBm

4.50%@ 30m/s

5. @2.8V with a passive antenna

More about SIMCom SIM28M Please contact:

Tel: 86-21-32523300 Fax: 86-21-32523301 Email: simcom@sim.com Website: www.sim.com

All specifications are subject to change without prior notice.