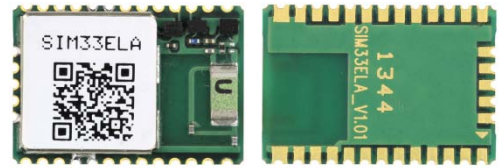




GNSS Antenna Module



SIM33ELA

SIMCom presents a high performance GPS module accompany with GNSS antenna-SIM33ELA. This is a standalone GNSS module embedded a linear antenna . Designed with MTK's high sensitivity navigation engine, it allows you to achieves the industry's highest levels of sensitivity, accuracy, and Time-to-First-Fix (TTFF) with lowest power consumption. And with embedded antenna in SMT type, it is very easy to embed into customer's application.

Smart Machine Smart Decision

Mechanical data

- Dimensions: 14*9.6*2.15mm
- Weight: 0.5g

Features

- Support GPS/GLONASS/Galileo/QZSS
- 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 PPS
- 3D-FIX
- FORCE -ON
- 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
- Sensitivity¹
 - Tracking: -165 dBm
 - Reacquisition: -160 dBm
 - Cold starts: -147 dBm
- Time-To-First-Fix²
 - Cold starts: 28 s (typical)
 - Warm starts: 26s
 - Hot starts: <1s
 - EPO Assist: 13s (CTTFF)
- Accuracy
 - Automatic Position³: 2.5m CEP
 - Speed⁴: 0.1m/s
- Operation temperature: -40℃~+85℃

Electrical data

- Power supply 2.8~4.3V
- Backup power 2.0V~4.3V
- Power consumption²
 - Acquisition 25mA
 - Tracking 20mA
 - Backup 14uA

1.Demonstrated on EVB KIT at library

2.All SV @ -130 dBm

3.50% 24 hr static, -130dBm

4.50% @ 30m/s

More about SIMCom SIM33ELA
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