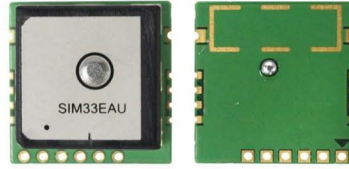


SIM33EAU



SIMCom presents a high performance module accompanied with a GNSS Antenna - SIM33EAU. This is a standalone GNSS module including an embedded patch antenna on it. Designed with MTK's high sensitivity navigation engine, it allows you to achieve the industry's highest levels of sensitivity, accuracy, and Time-to-First-Fix (TTFF) with the lowest power consumption. And with embedded antenna in SMT type, it is very easy to embed into the customer's application.

Product Specifications

Mechanical Data

Dimensions: 22 x 22 x 7mm

Weight: 8.5g

Features

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

Interfaces

- Serial Interface: UART
- Digital I/O: TIMEMARK (PPS) ; 3D-FIX
- Protocols: NMEA; PMTK

Support Product

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

Performance Data

- Receiver type: 33 tracking/99 acquisition channel GNSS receiver
- Max update rate: 10Hz
- Sensitivity:
 - Tracking: -165dBm
 - Cold Starts: -146dBm
 - Hot Starts: -160dBm
- Time-to-First-Fix²
 - Cold Starts: 31s (typical)
 - 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: 2.8 ~ 4.3V
- Backup Power: 2.3V ~ 4.3V
- Power Consumption: 3.3V (typical)
 - Acquisition: 38mA
 - Tracking: 32mA
 - Standby: 520uA
 - Backup: 14uA
- Antenna Type: Active and passive
- Antenna Power: External