



CG37

GNSS module

CG37 is an ultra-compact POT(Patch on Top) GNSS module. This is a standalone GNSS module in a SMT type base on MTK high sensitivity navigation engine. CG37 supports EASY™, provides up to 3 days GNSS orbit prediction ability without any host CPU porting or internet connection requirement. It has tiny package and extremely low power consumption, makes it easier to be applied to power sensitive devices.



Tiny Size



Ultra Low Power Consumption



Extended Temperature Range-40°C to +85°C



EASY™ Technology



Super Tracking Sensitivity-165dBm



Embedded Patch Antenna

Main Features

- Support EPO™ orbit prediction
- Support EASY™ self-generated orbit prediction
- Support GPS/Galileo/Glonass/BD2
- Support SBAS ranging (WAAS, EGNOS, GAGAN, MSAS)
- Low noise amplifier has been integrated
- Patch Dimensions : 18.4*18.4*4.0 mm
- Module Dimensions : 16.0*16.0*6.2 mm
- Weight : about 8g
- Operation temperature : -40°C~+85 °C

Power Management

- Power supply : +2.8V ~4.3V
- Backup power : +2.0V ~4.3V
- Power consumption
 - Acquisition : 25mA
 - Tracking : 22mA
 - Sleep : 340μA
 - Backup : 15μA
- Antenna type : Embedded

Interfaces

- Serial interface
 - UART
- Digital I/O
 - PPS
 - Force_on
 - 3D-FIX
- Protocols
 - NMEA
 - PMTK

Performance Data

- Receiver type
 - 33 tracking / 99 acquisition- channel GNSS receiver
- Maximum update rate: 10Hz
- Sensitivity
 - Tracking : -165 dBm
 - Reacquisition : -160 dBm
 - Cold starts : -148 dBm
- TTFF without EASY™
 - Cold starts : 32s (typical)
 - Warm starts : 30s
 - Hot starts : <1s
- TTFF with EASY™
 - Cold starts : 15s (typical)
 - Warm starts : 5s
 - Hot starts : <1s
- Accuracy
 - Automatic Position : 2.5m CEP
 - Speed : 0.1m/s

