



N39

GPS module

N39 is an ultra-compact POT(Patch on Top) GPS module. This is a standalone GPS module in a SMT type base on MTK high sensitivity navigation engine. 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 GPS
- Support EASY™ orbit prediction
- Support DGPS, QZSS, SBAS ranging (WAAS, EGNOS, GAGAN, MSAS)
- Low noise amplifier has been integrated
- Patch Dimensions : 15.0*15.0*4.0 mm
- Module Dimensions : 16.0*16.0*6.2 mm
- Weight : about 6g
- Operation temperature : -40°C~+85 °C

Power Management

- Power supply : +2.8V ~4.3V
- Backup power : +2.0V ~4.3V
- Power consumption
 - Acquisition : 18mA
 - Tracking : 16mA
 - Sleep current : 340μA
 - Backup : 8μA
- Antenna type : Embedded

Interfaces

- Serial interface
 - UART
- Digital I/O
 - PPS
- Protocols
 - NMEA
 - PMTK

Performance Data

- Receiver type
 - 22 tracking / 66 acquisition- channel GPS receiver
- GPS L1, C/A Code
- Max.update rate: 5Hz
- Sensitivity
 - Tracking : -165 dBm
 - Reacquisition : -160 dBm
 - Cold starts : -148 dBm
- Time-To-First-Fix without EASY™
 - Cold starts : 32s (typical)
 - Warm starts : 30s
 - Hot starts : <1s
- TTFF with EASY™ Assist
 - Cold starts : 15s (typical)
 - Warm starts : 5s
 - Hot starts : <1s
- Accuracy
 - Automatic Position : 2.5m CEP
 - Speed : 0.1m/s



LYNO