



# N10B

## GPS module

N10B is a small, high performance and reliable GPS/BEIDOU module. This is a independent SMT GPS/BEIDOU module 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



## Main Features

- Support EPO™ orbit prediction
- Support EASY™ self-generated orbit prediction
- Support GPS/BEIDOU
- Support SBAS(WAAS, EGNOS, GAGAN, MSAS)
- Built-in LNA
  - Dimensions: 10.1\*9.7\*2.5 mm
- Weight: <1 g
- 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: 18mA
  - Sleep current: 350μA
  - Backup: 14μA
- Antenna type: Active and Passive
- Antenna power: External or VCC\_RF

## Interfaces

- Serial interfaces
  - UART
  - I2C
- Digital I/O
  - PPS
  - INT Input
  - GPIO
- Protocols
  - NMEA 0183
  - PMTK

## Performance data

- Receiver type
  - 33 tracking / 99 acquisition- channel GPS receiver
- Max.update rate: 10Hz
- Sensitivity
  - Tracking: -165 dBm
  - Reacquisition: -160 dBm
  - Cold starts: -148 dBm
- Time-To-First-Fix
  - Cold starts: 31s (typical)
  - Warm starts: 26s
  - Hot starts: <1s
  - EPO Assist: 13s (CTTFF)
- Accuracy
  - Automatic Position: 2.5m CEP
  - Speed: 0.1m/s

## Certification

- CCC\*/CE\*



**LYNO**