

# 10B GNSS module

N10B is a small, high performance and reliable GNSS module. This is a independent SMT GNSS 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 Extended Temperature Consumption Range-40°C to +85°C





EASY<sup>™</sup> Technology

Super Tracking Sensitivity-165dBm

### Main Features

- Support EPO<sup>™</sup> orbit prediction
- Support EASY<sup>™</sup> self-generated orbit prediction
- Support GPS/Galileo/Glonass/BD2
- 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: 22mA
- Sleep current: 340µA
- Backup: 14µA
- Antenna type: Active and Passive
- Antenna power: External

# Performance data

- Receiver type
  33 tracking / 99 acquisition- channel GNSS
  receiver
- Max.update rate: 10Hz
- Sensitivity
- Tracking: -165 dBm
- Reacquisition: -160 dBm
- Cold starts: -148 dBm
- Time-To-First-Fix
  - Cold starts: 25s (typical)
- Warm starts: 23s
- Hot starts: <1s
- EPO Assist: 14s (CTTFF)
- Accuracy
  - Automatic Position: 2.5m CEP
  - Speed: 0.1m/s

### **Interfaces**

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



