



N10HD

GNSS module

N10HD is a high precision, high sensitivity, stable and reliable single-frequency and multi-star GNSS positioning module. The module is on ALLYSTAR high sensitivity navigation engine. The Module supports GPS、BD、Glonass、QZSS, and supports BD3 B1C frequency point;

N10HD has high receiver sensitivity for more receiver channels、 DSP hardware accelerations and internal LNA. The module adopts AGNSS and has standard 10.1*9.7mm LCC package. It can be widely used in vehicle, ship, asset tracking and other scenarios.



Low power consumption



Tiny Size



Temperature
-40°C to +85°C



Super Tracking
Sensitivity-162dBm



LCC



BD3

Main Features

- Support GPS+BD/Glonass+QZSS
- Support single and two systems reception
- GPS/QZSS: L1C/A
BDS: B1I, B1C
Glonass: L1
Galileo: E1
SBAS: WAAS, EGNOS, MSAS, GAGAN, SDCM
- Support A-GNSS
- Support active antenna detection and protection
- Built-in LNA
- Operation Temperature: -40°C ~ +85 °C
- Package: LCC
- Dimensions: 10.1*9.7*2.2mm
- Weight: <1g

Power Management

- Power supply: 2.0V ~ 3.63V (Typical: 3.3V)
- IO level: 3.3V
- Backup power: 1.62V ~ 3.63V
- power consumption
Acquisition: 16mA
Tracking: 16mA
Backup: 9μA
- Antenna type: Active and Passive
- Antenna power: External

Interfaces

- Serial interfaces
UART
IIC
SPI
USB
- Digital I/O
PPS
GPIO
- Protocols
NMEA

Performance data

- Receiver channel type
88 channels & DSP hardware accelerations
- Maximum update rate: 10Hz
- Sensitivity
Tracking: -162 dBm
Reacquisition: -158 dBm
Cold starts: -148 dBm
- Time-To-First-Fix
Cold starts: 28s (typical)
Warm starts: 25s
Hot starts: <1s
- Accuracy
2.5m CEP50
Speed: 0.1m/s