



12.2mm



16mm



2.5mm

N20HD

GNSS module

N20HD is a high precision, high sensitivity, stable and reliable GNSS positioning module. The module is in a SMT type based on ALLYSTAR high sensitivity navigation engine. N20HD adopts 16*12.2*2.5mm LCC package. It supports high performance and small package, which makes it easy to be used in M2M scenarios, such as measurement, navigation, tracking, etc.



Low power consumption



Tiny Size



Temperature
-40°C to +85°C



Super Tracking
Sensitivity-162dBm



LCC

Main Features

- Support GPS/BD/QZSS
- Support single and two systems reception
- Support A-GNSS
- Support active antenna detection and protection
- Built-in LNA
- Operation Temperature: -40°C~+85 °C
- Package: LCC
- Dimensions: 16*12.2*2.5mm
- Weight: <1g

Power Management

- Power supply: 2.5V ~3.6V(Typical: 3.3V)
- IO level: 3.3V
- Backup power: 1.6V ~3.6V
- power consumption
 - Acquisition: 37mA
 - Tracking: 36mA
 - Standby: 6mA
 - Backup: 14μA
- 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
 - 72 channels & DSP hardware accelerations
- Maximum update rate: 20Hz
- Sensitivity
 - Tracking: -162 dBm
 - Reacquisition: -159 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