



N20A

GNSS module

N20A is a small, high performance and automatic assisted GNSS module. It is based on MTK high sensitivity navigation system, supporting dual-star. It is reliable and can be used steadily for 5-10 years during $-40\sim 85^{\circ}$. It has tiny package and extremely low power consumption, which makes it easier to be applied to power sensitive devices.



Tiny Size



Ultra Low Power Consumption



Extended Temperature Range -40°C to $+85^{\circ}\text{C}$



EASY™ Technology



Super Tracking Sensitivity -165dBm



Automatic



Main Features

- Support EPO™ orbit prediction
- Support EASY™ self-generated orbit prediction
- Support GPS/Galileo/Glonass/BD2
- Support SBAS ranging (WAAS, EGNOS, GAGAN, MSAS)
- Low-noise amplifier has been integrated
- Dimensions : 16*12.2*2.5 mm
- Weight : <1 g
- Operation temperature : -40°C~+85 °C

Power Management

- Power supply: +3.1V ~4.3V
- Backup power : +2.0V ~4.3V
- Power consumption
 - Acquisition : 25mA
 - Tracking : 22mA
 - Sleep : 340μA
 - Backup : 14μA
- Antenna type : Active and Passive
- Antenna power : External

Interfaces

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

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 : 15s (CTTFF)
- Accuracy
 - Automatic Position : 2.5m CEP
 - Speed : 0.1m/s

Certification

- AEC-Q100 (IC)



LYNO