



N20

GPS module

N20 is a small, high performance and reliable assisted GPS module. This is a standalone GPS module in a SMT type 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 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 : +2.8V ~4.3V
- Backup power : +2.0V ~4.3V
- Power consumption
 - Acquisition : 18mA
 - Tracking : 16mA
 - Sleep : 340µA
 - Backup : 8µA
- Antenna type : Active and Passive
- Antenna power : External

Interfaces

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

Performance data

- Receiver type
 - 22 tracking / 66 acquisition- channel GPS receiver
 - GPS L1, C/A Code
- Max.update rate : 5Hz
- Sensitivity
 - Tracking : -165 dBm
 - Reacquisition : -160 dBm
 - Cold starts : -148 dBm
- Time-To-First-Fix
 - Cold starts : 32s (typical)
 - Warm starts : 30s
 - Hot starts : <1s
 - EPO Assist : 15s (CTTFF)
- Accuracy
 - Automatic Position : 2.5m CEP
 - Speed : 0.1m/s



LYNO