



# L100

## GNSS module

L100 is an ultra-compact POT(Patch on Top) GPS+NavIC module. This is a standalone GNSS module in a SMT type base on ST 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



NavIC



Super Tracking Sensitivity-162dBm



Embedded Patch Antenna

## Main Features

- Support GPS+NavIC
- Support STAGNSS™ orbit prediction
- Support SBAS ranging (WAAS, EGNOS, GAGAN, MSAS)
- Low-noise amplifier has been integrated
  - Module Dimensions: 16.00\*18.00\*2.45 mm
  - Patch Dimensions: 25.0\*25.0\*4.0mm+15.0\*15.0\*4.0mm
- Weight: about 20g/ 5g without Antenna
- Operation temperature: -40°C~+85 °C

## Power Management

- Power supply: +3.3V
- Backup power: +1.6V ~+4.3V
- Power consumption
  - Acquisition: 97.4mA
  - Tracking: 87.7mA
  - Sleep: TBD
  - Backup: TBD
- Antenna type: Embedded

## Interfaces

- Serial interfaces
  - UART
- Digital I/O
  - PPS/WAKEUP/RESET/ANT\_DET/STDBYN
- Protocols
  - NMEA
  - PSTM

## Performance Data

- Receiver type
  - 48 tracking channel/2 fast acquisition channels
- NMEA update rate: 1Hz
- Sensitivity
  - Tracking : -162 dBm
  - Reacquisition : -150 dBm
  - Cold starts : -146 dBm
- Time-To-First-Fix without STAGNSS™
  - Cold starts : 32s (typical)
  - Warm starts : 30s
  - Hot starts : <1s
- STAGNSS™ Assist
  - Cold starts : TBD (typical)
  - Warm starts : TBD
  - Hot starts : TBD
- Accuracy
  - Automatic Position : 2.5m CEP
  - Speed : 0.1m/s

