

# simpleRTK3B Pro

**affordable and low power dual/triple band GPS/GNSS RTK boards that allow you to reach millimeter-level accuracy in minutes, based on Septentrio Mosaic**



**SKU:** AS-RTK3B-MX5-L125-NH

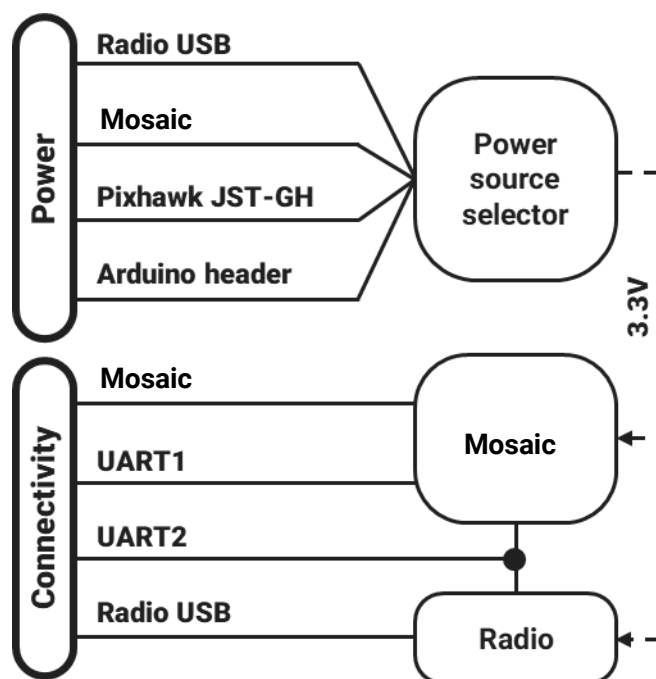
## Key features

- Millimeter level precision
  - <7mm with a base station up to 35km
  - <7mm with NTRIP up to 35km
  - <4cm with SSR corrections (PPP-RTK)
  - <1.2m in standalone mode
  - <0.6m standalone with SBAS coverage
- Based on Septentrio mosaic-X5 module
- Fully compatible with Arduino, Raspberry Pi, Nvidia Jetson Nano and STM32 Nucleo platforms, as a shield
- Protocols:
  - Septentrio Binary Format (SBF)
  - NMEA 0183, v2.3, v3.03, v4.0
  - RINEX v2.x, v3.x
  - RTCM v2.x, v3.x (MSM included)
  - CMR v2.0 (out/in), CMR+ (input only)

## Supported frequencies

- GPS: L1C/A L1PY L2C L2P L5
- GLONASS: L1CA L2CA L2P L3 CDMA
- Galileo: E1 E5a E5b E5 AltBloc
- BeiDou: B1I B1C B2a B2I B3
- QZSS: L1C/A L2C L5
- Navic: L5
- SBAS: WAAS, EGNOS, MSAS, GAGAN, SDCM (L1 L5)

## Functional schematic diagram



## Mechanical

- Arduino UNO form factor 69x53mm
- 24g (without radio)
- Compatible with Arduino UNO headers
- 3xM3 holes (Arduino UNO compatible)
- Supports all radio modules via 2mm 10pin headers

## Electrical

- Power consumption: 250mA @ 5V
- Active antenna power supply at 3V up to 75mA
- Interfaces: USB, UART(3)
- Timepulse output, Time sync input
- XBee socket up to 1A @ 3V