

simpleRTK3B mPCIe

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-MPCIe-L1L2-MH



Dimensions: 52x32x6mm

Key features

- Millimeter level precision
 - <1cm with a base station up to 35km
 - <1cm with NTRIP up to 35km
 - <1.2m in standalone mode
 - <0.6m standalone with SBAS coverage
- Based on Septentrio Mosaic-H
- Update rate
 - Default: 1Hz
 - Measurements only: up to 100Hz
 - Standalone, SBAS, DGPS + attitude: up to 50Hz
 - RTK+attitude: up to 20Hz
- Multi band: L1, L2 and L5b support, 448 hardware channels
- 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)
- Start-up times:
 - Cold start: <45s
 - Warm start: <20s
 - Re-acquisition: 1s
- GNSS attitude accuracy
 - 1 m antenna separation: 0.15deg heading, 0.25deg pitch/roll
 - 5 m antenna separation: 0.03deg heading, 0.05deg pitch/roll

Electrical

- Interfaces (check product documentation to verify which are available):
 - USB, UART, Timepulse, Event
- Base and Rover functionality

Environmental

- Certification: CE, WEEE, ISO 9001-2015
- Documentation: RED, RoHS
- Operating temperature Range: -40 to +85deg

Supported frequencies

- GPS: L1 L2
- GLONASS: L1 L2
- BeiDou: B1 B2
- Galileo: E1 E5b
- QZSS: L1 L2
- SBAS: WAAS, EGNOS, MSAS, GAGAN, SDCM (L1)

Mechanical

- Arduino UNO form factor 69x53mm
- Weight 9 gr
- Compatible with MiniPCIe full-size socket

Mouser Electronics

Authorized Distributor

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