**M.2 MOSAIC GNSS RECEIVER CARD**

Positioning module compatible with M.2 form factor for the use in industrial PCs and development boards (e.g. Nvidia jetson)

ALL-IN-VIEW GNSS Satellite tracking: multi-constellation, multi-frequency for fast convergence time

Advanced Septentrio technology inside: AIM+, LOCK+, APME+, IONO+

- High rate RTK solution output
- Accurate position and attitude
- Small form factor
- Breakthrough price
- Easy System Integration
PERFORMANCE

Accurate RTK Positioning ¹ (1σ):
Horizontal accuracy: 0.006 m + 1 ppm
Vertical accuracy: 0.010 m + 1 ppm

Accurate Attitude ¹,² (1σ):
Antenna separation
1 m: Heading 0.15°, Pitch/Roll 0.25°
5 m: Heading 0.03°, Pitch/Roll 0.05°
Velocity Accuracy: 0.03 m/s RMS

Maximum update rate:
Measurements only: 100 Hz
Standalone, SBAS, DGPS + attitude: 50 Hz
RTK + attitude: 20 Hz
Latency: < 10 ms

¹ Depends on Environment and used GNSS-Antenna
² Only available with MOSAIC-H

Physical and Environmental

Package: Compatible with M.2 Key E
Size: 31 x 42.8 mm
Clearance: 4.17 mm top, 1.20 mm bottom

Antenna connector type: MMCX socket
Antenna pre-amplification range: 15-50 dB
Antenna bias voltage: 5 V
Build-in current limit (150 mA)

Input voltage: 3.3 VDC +/-5%
Power consumption: 0.6 W typ., 1.1 W max
Environmental Operating temp.: -40 to 85° C
Storage temp.: -55 to 85° C
Humidity: 5% 95% (non-condensing)
Certification: RoHS, WEEE
Driver: from Septentrio

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)

ANavS GmbH
Gotthardstraße 40, 80686 Munich
Phone: +49 (0) 89 89056721
Fax: +49 (0) 89 89056720
Email: info@anavs.de
Web: http://www.anavs.com

Issue: 1.04 Date: 11.03.2023