Multi-Sensor RTK Module

WITH AN ADVANCED SENSOR FUSION FRAMEWORK

Dual-Frequency & Multi-Constellation GNSS for fast convergence time

Multi-Sensor fusion on a single board for Autonomous Vehicles, Robots, UAVs and Vessels

Interfaces to GNSS, INS, Odometry, Camera, Lidar, LPS and Barometer data

High rate solution output
Accurate attitude and position
Overcomes signal outages

Breakthrough price
Easy System Integration
**SENSOR FUSION PERFORMANCE**

Accurate Positioning (1σ):
- Horizontal accuracy: 0.015 m + 1 ppm
- Vertical accuracy: 0.030 m + 1 ppm

Accurate Attitude (1σ):
- Accuracy: 0.25° (1m antenna spacing)

Velocity Accuracy: 0.03 m/s RMS

Time-Stamp Accuracy: 1 μs RMS

Solution Output-Rate: up to 120 Hz

RTK Initialization:
- Initialization Time: < 10 sec
- Initialization Reliability: > 99 %
- Solution Latency: < 30 ms

**GNSS FEATURES**

GNSS Constellations:
- Galileo, GPS, Glonass, Beidou, SBAS

GNSS Const. concurrent:
- All

GNSS-Bands:
- GPS L1C/A L2C,
- GLO L1OF L2OF,
- GAL E1B/C E5b,
- BDS B1I B2I,
- QZSS L1C/A L2C

Channels: 184

GNSS data rate: 20 Hz

Jamming detection: Yes

Timepulse-Output: Yes

---

**MECHANICAL & ENVIRONMENTAL**

Dimension: 135 x 90 x 30 mm

Weight: 110 g

Temperature: -40°C to +85°C

---

**ELECTRICAL & INTERFACES**

Power Connector:
- USB-C 5V or
- Terminal connector up to 24V

Power Consumption:
- Peak: 10 W (2 A)
- Average: 6.5 W (1.3 A)

Communication Interfaces:
- Ethernet, WLAN, CAN, UART, LTE

Output format:
- Standardized: NMEA format
- Proprietary: ANavS binary format

---

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