gnss oem
geopositioning electronics

Features:

- Antenna input with SMA connector
- PPS output with SMA connector
- USB C connector
- Green Time pulse LED, purple Power LED, red LED (GPIO1), orange LED (GPIO2)
- RxTools Control and Analysis Software
- Extensive visualization and evaluation features
- Dimensions 85x30x15 mm
- Weight: 20 gr.
- Fully assembled, tested and ready to use

MODULE FEATURES

789 hardware channels for simultaneous tracking of all visible supported satellite signals

5 constellations RTK engine (rover) and advanced RTK technology
Full raw measurement data

AIM+: Industry leading Anti-jamming, Anti-spoofing Interference Monitoring and Mitigation

IONO+: Advanced protection against ionospheric disturbances to GNSS signals

APME+: a posteriori multipath estimator for code and phase multipath mitigation

LOCK+: superior tracking robustness under heavy mechanical shocks or vibration

RAIM+: Advanced Receiver Autonomous Integrity Monitoring
22.8 x 16.4 x 2.4 mm LGA package

OTHER FEATURES

Physical Characteristics:	Packaging: 94 pin LGA Dimension: 22.8 × 16.4 × 2.4 mm Weight: 2.2g
Environmental Specifications:	Working temperature: -40 °C ~ +85 °C Storage temperature: -55 °C ~ +85°C Humidity: 5% ~ 95% No condensation Vibration: IEC 60721-3-5 Profile 5M3, MIL-STD-810H 514.8 Category 4, MIL-STD-810H 516.8 Procedure 1
Communication Interfaces:	2 × UART (LVTTL, up to 4Mbps, one with hardware flow control) 1 × USB (2.0, HS up to 480Mbps) 2 x Event inputs 2 x GPIO 2 x PPS out

PERFORMANCE

Frequency:	GPS: L1C/A, L1C, L2C, L2P(Y), L5 GLONASS: LICA, L2CA, L2P, L3 CDMA Beidou: B1I, B1C, B2a, B2I, B2b, B3I Galileo: E1, E5a, E5b, E6 QZSS: L1C/A, L1C/B, L2C, L5, L6* * L6 support and Galileo HAS support will be rolled out via software update
Single point positioning (RMS):	Horizontal: 1.2 m Vertical: 1.9 m Time Precision(xPPS out) - 1.4 ns Event accuracy < 3 ns Cold start < 35 s Data Update Rate: 20 Hz
DGPS (RMS):	Horizontal: 0.4 m Vertical: 0.7 m Data Update Rate: 20 Hz Differential Data - RTCM V2.X
RTK (RMS):	Horizontal: 0.6 cm + 0.5 ppm Vertical: 1cm + 1 ppm Initialization Time: 7 s Data Update Rate: 20 Hz Differential Data - RTCM V3.X (MSM included) Data Format - NMEA-0183, v2.3, v3.03, v4.0, RINEX v2.x, v3.x, Septentrio Binary Format (SBF), RTCM V3.X (MSM included)