

GNX-1000 High-Precision GNSS Sensor Module

Technical Datasheet



Overview

The GNX-1000 is a compact, high-precision GNSS sensor module engineered for industrial, defense, and autonomous applications. It features a built-in L1-band GNSS receiver, low-noise RF front-end, high-speed ADC, and RTK support for centimeter-level positioning even in harsh environments.

Key Features

- Multi-constellation support: GPS, GLONASS, Galileo, BeiDou
- RTK-compatible for centimeter-level accuracy
- Low-noise RF front-end
- High-speed ADC and advanced signal conditioning
- Compact 24mm x 24mm form factor

- Interfaces: UART, SPI, I2C
- Low power consumption: <50mW
- Operating temperature: -40C to +85C

Technical Specifications

- Frequency Band: L1 (GPS, GLONASS, Galileo, BeiDou)
- Positioning Accuracy: Up to 1 cm (with RTK)
- Update Rate: Up to 10 Hz
- Interfaces: UART, SPI, I2C
- Voltage Input: 3.3V - 5V
- Power Consumption: <50 mW
- Dimensions: 24mm x 24mm x 4mm
- Operating Temperature: -40C to +85C
- Connector: MMCX (for external GNSS antenna)

Target Applications

- Autonomous Vehicles & Drones
- Defense Navigation Systems
- Industrial Robotics
- Precision Agriculture
- IoT & Asset Tracking

Contact

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