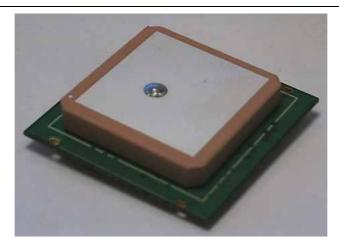


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MTI-5 (UART Interface)

Fast Acquisition Enhanced Sensitivity GPS Sensor Module



GENERAL DESCRIPTION

The MTI-5 is a compact all-in-one GPS module solution suitable for a broad range of end product applications, where fast and easy system integration and minimal development risk is required.

The **MTI-5** is optimized for good performance and low cost. Having fast time-to-first-fix and enhanced sensitivity, the **MTI-5** offers good navigation performance even in urban canyons.

Satellite-based augmentation systems, such as WAAS and EGNOS, are supported to yield improved accuracy.

UART interface is provided on the interface connector. Supply voltage of 3.6V~5.5V is supported.

KEY PRODUCT FEATURES

- SBAS (WAAS, EGNOS) support
- High sensitivity: -140dBm acquisition
 - -152dBm tracking
- Fast TTFF: < 10 second hot start
 - 35 second warm start
 - 45 second cold start
- 5m CEP accuracy
- UART/TTL interface
- Low current consumption: 40mA, typical



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SPECIFICATIONS

Receiver L1, 1575.42MHz **Interface** UART/TTL

1.023MHz chip rate

Power Supply $3.6V \sim 5.5V$

Accuracy Position: 5m CEP

Velocity: 0.1m/sec, without SA Current Consumption 40mA, typical

Time: ±100ns synchronized to

GPS time

Operating Temperature -40°C ~ 85°C(not include

battery)

Startup Time Hot Start: < 10sec

Warm Start: 35sec, average **Dimension** 32.0mm (L) x 32.0mm (W) x

8.2mm (H)

Cold Start: 45sec, average

Weight 13g

Reacquisition 1s

Sensitivity -140dBm acquisition

-152dBm tracking

Dynamic

Conditions Altitude: <18,000m

Velocity: <515m/s

Acceleration: <4G

GPS Protocol NMEA-0183 V3.01

4800, 9600, 19200, 38400 baud

Default 4800bps, 8, N, 1

Datum WGS-84