

Features

- 12 parallel channel GPS receiver
- 4000 simultaneous time-frequency search bins
- SBAS (WAAS, EGNOS) support
- Programmable Flash version
- -140dBm acquisition sensitivity
- -150dBm tracking sensitivity
- < 10 second hot start
- < 45 second cold start
- 5m CEP accuracy

GT-310F (Flash version)

Fast Acquisition Enhanced Sensitivity 12 Channel GPS Sensor Module

The GT-310F module is a small, single-board, 12 parallel-channel receiver intended for Original Equipment Manufacturer (OEM) products.

The receiver continuously tracks all satellites in view and provides accurate satellite positioning data. The GT-310F is optimized for applications requiring good performance, low cost, and maximum flexibility; suitable for a wide range of OEM configurations including handhelds, asset tracking, marine and vehicle navigation products.

Its 12 parallel channels and 4000 search bins provide fast satellite signal acquisition and short startup time. Acquisition sensitivity of -140dBm and tracking sensitivity of -150dBm offers good navigation performance even in urban canyons having limited sky view.

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

Users can modify the NMEA sentences and Binary code

Product Specifications

Receiver Type	12 parallel channel L1 C/A code	UniTraq International Co., LTD.
Accuracy	Position 5m CEP Velocity 0.1m/sec Timing +/-1us	No. 25, Alley 3, Lane 162, Kesheyuan road, Hsinchu City, 300, Taiwan Phone +886 3 5786698, +886 3 5786697 Fax +886 3 5772589 Email info@UniTraq.com Website www.UniTraq.com
Startup Time	< 10sec Hot Start < 35sec Warm Start < 45sec Cold Start	
Signal Reacquisition	1s	
Sensitivity	-140dBm acquisition -150dBm tracking	Information provided by UniTraq is believed to be accurate and reliable. These materials are provided by UniTraq as a service to its customers and may be used for informational purposes only. UniTraq assumes no responsibility for errors or omissions in these materials, nor for its use. UniTraq reserves the right to change specification at any time without notice.
Dynamics	4G (39.2m/sec ²)	
Operational Limits	Altitude < 18,000m or Velocity < 515m/sec (COCOM limit, either may be exceeded but not both)	UniTraq products are not intended for use in medical, life-support devices, or applications involving potential risk of death, personal injury, or severe property damage in case of failure of the product.
Protocol	NMEA-0183, ver. 3.01 9600 baud, 8 N 1	
Datum	Default WGS-84 User definable	
Serial Interface	LVTTTL Level	
RF Connector	MMCX	
Interface Connector	10pin 2mm male header	
Power Supply	3.3V +/- 100mV or 3.8V ~ 8.0V (5V version)	
Current Consumption	28-33 mA	
Operating Temperature	-40°C ~ 85°C	
Dimension	43L x 31W x 6H (mm)	
Weight	10g	