



## *Data Sheet*

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MADE IN TAIWAN

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## **GT-3731T**

### **Fast Acquisition Enhanced Sensitivity 48 Channels USB Interface GPS Receiver**

#### **1. FEATURES**

- ⌘ 48 channels to acquire and track satellites simultaneously
- ⌘ Industry-leading TTFF speed
- ⌘ High sensitivity of -160dB in tracking
- ⌘ SBAS (WAAS/EGNOS) capable
- ⌘ Cold start < 36sec
- ⌘ Reacquisition < 1sec
- ⌘ Accuracy 2.5m CEP
- ⌘ USB Interface
- ⌘ Easy-plug-in Notebook
- ⌘ User configurable and store in memory
- ⌘ 25.4 mm x 25.4 mm x 6.5 mm
- ⌘ RoHS compliance

The **GT-3731T** is a compact all-in-one GPS receiver that continuously tracks all satellites in view and provides accurate satellite positioning data.

Its 48 parallel channels and 400K search bins provide fast satellite signal acquisition and short start-up time. Acquisition sensitivity of -146dBm and tracking sensitivity of -160 dBm offer good performance even under difficult environments.

The **GT-3731T** is optimized for applications requiring good performance and low cost; it is suitable for a wide range of handhelds, asset tracking, Notebook, PDA-centric personal navigation system, and vehicle navigation products.

## 2. SPECIFICATIONS

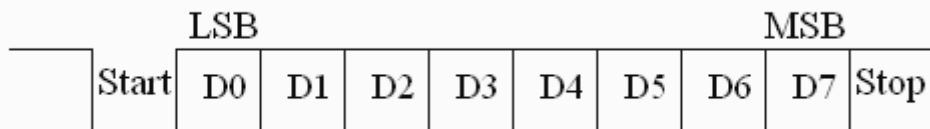
Parameter	Specification
Receiver Type	48 channels
Acquisition sensitivity	-146dBm
Tracking sensitivity	-160dBm
Receiver frequency	1575.42MHz
Code	C/A code
Accuracy (1) Position (2) Velocity	2.5m CEP 0.1m/sec
Startup Time hot start warm start cold start	< 2 sec < 26 sec < 36 sec
Signal Reacquisition	<1s
Update Rate	1Hz
Operational Limits (1) Altitude (2) velocity	< 18,000m < 515m/s
Dynamics	4G (39.2m/sec <sup>2</sup> )
Datum	WGS-84
Protocol	NMEA-0183 V3.01
Serial Interface	USB interface
Input Voltage	5V ±5%
Power Consumption	130mW
Connector	USB B-type 4P male connector with 1.8M cable

### 3. GPS STATUS INDICATOR

The **GT-3731T** provides GPS status indicator. LED On board shows fix or non-fix. In fix mode, the LED will be blinking in 1-second cycle. And it will blink in 3-second cycle while no fix. The light on is 400ms.

### 4. COMMUNICATION SEPECIFICATIONS

Item	Description
Interface	Full duplex serial interface
Bit rate	4800,9600,19200,38400,57600,115200 baud (default9600)
Start bit	1bit
Stop bit	1bit
Data bit	8bit
Parity	none
Transmission data	NMEA0183 Ver:3.01
Update rate	1Hz
Output sentence	GPGGA, GPGLL, GPGSA, GPGSV, GPRMC, GPVTG, GPZDA



**5. ENVIRONMENT SPECIFICATION**

Parameter		Specification
Temperature	Operating	-20°C ~ +60°C
	Storage	-40°C ~ +80°C
Humidity		5%~95%

**6. PIN ASSIGNMENT**



PIN	Signal name	Description	Notes
1	VCC	USB port power	5V
2	D-	USB port data-	
3	D+	USB port data+	
4	GND	USB ground	

## 7. MECHANICAL DIMENSION



Parameter	Specification
Physical dimension	25.4mm X 25.4mm X 6.5mm
Weight	10g

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