



Data Sheet

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MADE IN TAIWAN



GT-3321

Fast Acquisition Enhanced Sensitivity 48 Channels GPS Receiver

1. FEATURES

- 48 channels GPS receiver, 32 acquisition & 16 tracking channels
- High sensitivity of -160dB in tracking & -146 dB in acquisition
- SBAS (WAAS, MSAS, EGNOS) support
- Fast TTFF in all modes (a typical outdoor)
- Hot-start in 2s,
- Warm-start in 31s,
- Cold-start in 32s
- 2.5m CEP accuracy (DGPS)
- Support standard NMEA-0183 & PTC command protocol
- Configurable NMEA output
- RoHS compliance

The GT-3321 is a compact all-in-one GPS receiver that continuously tracks all satellites in view and provides accurate satellite positioning data. Its 48 channels provide fast satellite signal acquisition and short startup time. Acquisition sensitivity of -146dBm and tracking sensitivity of -160dBm offer good navigation performance even in urban canyons having limited sky view.

RS232-level serial interfaces are provided on the interface connector and supply voltage of 2.7V~6V is supported.

The GT-3321 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. SPECIFICATION

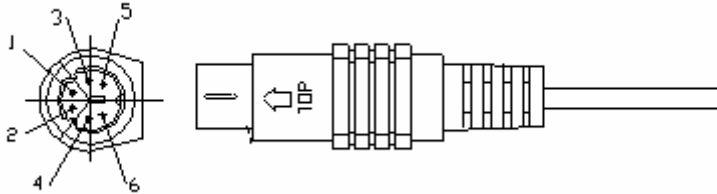
Parameter		Specification
Receiver Type		48 channels
Re-acquisition sensitivity		-146dBm
Tracking sensitivity		-160dBm
Receiver frequency		1575.42MHz
Code		C/A code
Accuracy		
(1) Position		2.5m CEP (DGPS)
(2) Velocity		0.1m/sec
Startup Time		
hot start		< 2 sec
warm start		< 31 sec
cold start		< 32 sec
Update Rate		1Hz
Operational Limits		(COCOM limit, either may be exceeded but not both)
(1) Altitude		< 18,000m
(2) velocity		< 515m/s
Dynamics		4G (39.2m/sec ²)
Datum		WGS-84
Protocol		NMEA-0183 V3.01 NMEA Message: GPGGA, GPGLL, GPGSA, GPGSV, GPRMC, GPVTG, GPZDA Baud Rate: 4800, 9600, 19200, 38400, 57600, 115200 (Upon request) *GPGLL, GPZDA is off and GPGSV message is output every 5 second under 4800 bps. Standard: NMEA output message: GPRMC, GPGGA, GPGSA, GPGSV Baud rate: 4800, 8 N 1
Serial Interface		RS232 signal output
Input Voltage		2.7V to 6V
Power Consumption		< 100mW (3.3V)
Connector		6 pins PS2 connector or 4pins open wire with 1.8M cable
Temperature	Operating	-20°C ~+60°C
	Storage	-40°C ~+60°C
Humidity		5%~95%

3. GPS STATUS INDICATOR

The GT-3321 provides GPS status indicator. It will flash slowly about 1 second on and one second off before fixed. While fixed, it will light on in fix mode.

4. PIN ASSIGNMENT

For PS2:



PIN	Signal name	Description	Notes
1	GND	Ground	
2	VCC	Power input	2.7V to 6V
3	NC	No use	
4	RS232_RXD0	RS232 signal received data line	
5	RS232_TXD0	RS232 signal transmitted data line	
6	NC	No use	

For Open Wire:

PIN	Color	Signal name	Description	Notes
1	Black	GND	Ground	
2	Red	VCC	Power input	2.7V to 6V
3	White	RS232_RXD0	RS232 signal received data line	
4	Green	RS232_TXD0	RS232 signal transmitted data line	

5. MECHANICAL DIMENSION



Parameter	Specification
Physical dimension	49.8mm X 43.7mm X 17.6mm
Weight	66g



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