

PRODUCT SPECIFICATION

USB GPS RECEIVER

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Product Feature

- “SiRF Star II /LP” high performance and low power consumption chipset
- All-in-view 12-channel parallel processing
- Built-in active antenna
- High sensitivity to satellite signal
- Cold start under 45 seconds, average
- Superior urban canyon performance
- FoliageLock for weak signal tracking
- Build-in SuperCap to reserve system data for rapid satellite acquisition.
- Supported NMEA 0183 command: GGA, GSA, GSV, RMC, GLL, VTG
- Super-cohesive magnetic for mounting on the car
- LED indicator for GPS fix or not fix

LEDOFF: Receiver switch off

LED ON: No fixed, Signal searching

LED Flashing: Position Fixed

- Water resisted and non-slip on the bottom
- USB interface connection port

System Specification

Electrical Characteristics (Receiver)		
Frequency	L1, 1575.42 MHz	
C/A Code	1.023 MHz chip rate	
Channels	12	
Sensitivity	-170 dBW	
Accuracy		
Position Horizontal	15m 2D RMS (SA off)	
Velocity	0.1m/sec 95% (SA off),	
Time	1 micro-second synchronized to GPS time	
WAAS enabled	10m 2D RMS	
Datum		
Datum	WGS-84	
Acquisition Rate		
Hot start	8 sec., average (with ephemeris and almanac valid)	
Warm start	38 sec., average (with almanac but not ephemeris)	
Cold start	45 sec., average (neither almanac nor ephemeris)	
Reacquisition	0.1 sec. average (interruption recovery time)	
Protocol		
GPS Protocol	Default: NMEA 0183 (Secondary: SiRF binary)	
GPS Output Data	SiRF binary >> position, velocity, altitude, status and control NMEA 0183 MEA0183 V2.2 protocol, and supports command: GGA, GSA, GSV, RMC, VTG, GLL v2.2 (VTG and GLL are optional)	
GPS transfer rate	Software command setting (Default : 4800,n,8,1 for NMEA)	
Dynamic Condition		

	Acceleration Limit	Less than 4g
	Altitude Limit	18,000 meters (60,000 feet) max.
	Velocity Limit	515 meters/sec. (1,000 knots) max.
	Jerk Limit	20 m/sec**3
Temperature		
	Operating	-30°~ 80°C
	Storage	-40°~ 85°C
	Humidity	Up to 95% non-condensing
Power		
	Voltage	5V ±5%
	Current	90mA typical
Physical Characteristics		
	Dimension	2.32" x 1.85" x 0.82" (59mm x 47mm x 21mm)
	USB Cable Length	65"
Low Noise Amp		
	Amplifier Gain w/out cable	27 dB Typical
	Filtering	-25dB (+100 MHz)
	Output VSWR	2.0 Max.
	Voltage	DC 3 ~ 5.0V
	Current	15mA max. @5VDC



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Due to continuous product improvements, all specifications may be subject to change without notice