## PRODUCT SPECIFICATION USB GPS RECEIVER

## **Product Feature**

- "SiRF Star ∏/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
GF3 Output Data	
	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