



## PRODUCT SPECIFICATION

### GPS RECEIVER

### A-511S

### Features:

SiRF star III high performance GPS Chip Set  
Very high sensitivity (Tracking Sensitivity: -159 dBm)  
Extremely fast TTFF (Time To First Fix) at low signal level  
Support NMEA 0183 data protocol  
Built-in SuperCap to reserve system data for rapid satellite acquisition  
Built-in patch antenna  
Super-cohesive magnetic for mounting on the car  
Water resisted and non-slip on the bottom  
USB/PS2/DB9 interface connection port  
LED indicator for GPS fix or not fix

LEDOFF:	Receiver switch off
LED ON:	No fixed, Signal searching
LED Flashing:	Position Fixed

### Specification:

#### **General**

Chipset	SiRF Star III
Frequency	L1, 1575.42 MHz
C/A code	1.023 MHz chip rate
Channels	20 channel all-in-view tracking
Sensitivity	-159 dBm

#### **Accuracy**

Position	10 meters, 2D RMS 5 meters, 2D RMS, WAAS enabled
Velocity	0.1 m/s
Time	1us synchronized to GPS time

#### **Datum**

Default	WGS-84
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### Acquisition Time

Reacquisition	0.1 sec., average
Hot start	1 sec., average
Warm start	38 sec., average
Cold start	42 sec., average

### Dynamic Conditions

Altitude	18,000 meters (60,000 feet) max
Velocity	515 meters /second (1000 knots) max
Acceleration	Less than 4g
Jerk	20m/sec **3

### Power

Main power input	4.5V ~ 6.5V DC input
Power consumption	80mA

### Protocol

Electrical level	Output voltage level: 0V ~ 2.85V
Baud rate	4,800 bps
Output message	NMEA 0183 GGA, GSA, GSV, RMC, VTG, GLL

### Physical Characteristics

Dimension	53mm diameter, 19.2mm height
Cable Length	65"

**Connection Port Options**    USB/PS2/DB9

**Operating temperature**    -40°C to +85°C