

# GPS Permanent & Magnet Mount

A Global Positioning System (GPS) puts an impressive amount of information at your fingertips, including vehicle location, speed, and time data. You can also view this information synchronized with mapping.

vMax® software displays a precise location of a bus on a map, including the street name and other critical information, while simultaneously providing video footage. Seon offers two GPS receivers depending on your preferred mounting option.

The Seon GPS4 is a receiver with an integrated magnetic base. The receiver is 1.4 x 1.7 x 0.6 inches, and weighs just a few ounces for easy installation inside a vehicle.

Seon's GPS2 Receiver can be utilized for a variety of applications, and it is ideal for bus fleets that require permanent mounting. With bulkhead (through-hole) mounting and a low-profile design, the GPS2 is completely self-contained and waterproof. It incorporates the latest SiRF Star III GPS chip set and an active patch antenna, giving you a high degree of GPS accuracy.

## Permanent Mount GPS2

- Ideal for bus fleets that require a permanent mounting configuration.
- Bulkhead (through-hole) mounting and a low-profile housing; self-contained and waterproof.
- Incorporates the latest SiRF Star III GPS chip set and an active patch antenna for a high degree of GPS accuracy.



## Magnet Mount GPS4

- Integrated magnetic base.
- 1.4 x 1.7 x 0.6 inches.
- Weighs just a few ounces for easy installation inside a vehicle.



## Specifications

Receiver Performance Data	GPS2	GPS 4
<b>Receiver Type</b>	20-channel, L1 frequency, C/A code	20-channel, L1 frequency, C/A code
<b>Horizontal Position Accuracy</b>	32.8' (10 m) Autonomous 16.4' (5 m) WAAS (50% 24hr static, -130 dBm)	<8.2' (< 2.5 m) Autonomous <6.6' (< 2 m) WAAS (50% 24 hr static, -130 dBm)
<b>Velocity Accuracy</b>	<0.01 m/s, 0.036 km/h, 0.022 mph (speed) <0.01 (heading) (50% @ 30 m/s)	<0.01 m/s, 0.036 km/h, 0.022 mph (speed) <0.01 (heading) (50% @ 30 m/s)
<b>Time To First Fix</b>	Autonomous	Autonomous
<b>Hot Start</b>	<1 sec	<1 sec
<b>Warm Start</b>	<35 sec	<35 sec
<b>Cold Start</b>	<42 sec (50% -130 dBm)	<42 sec (50% -130 dBm)
<b>Sensitivity (Autonomous)</b>	-142 dBm (acquisition) -159 dBm (tracking) (-142 dBm 28 dB-Hz with 4 dB noise figure)	-142 dBm (acquisition) -159 dBm (tracking) (-142 dBm 28 dB-Hz with 4 dB noise figure)
<b>Max. Update Rate</b>	1Hz	1Hz
<b>Max. Altitude</b>	<18,000 m	<18,000 m
<b>Max. Velocity</b>	<1,852 km/hr	<1,852 km/hr
<b>Protocol Support</b>	NMEA v2.20, 4800bps N,8,1;	NMEA v3.00, 4800bps N,8,1;
<b>Electrical Data</b>		
<b>Power Supply</b>	3.3 to 5.5 VDC	3.3 to 5.5 VDC
<b>Power Consumption</b>	42 mA/average tracking	31 mA/average tracking
<b>Environmental Data</b>		
<b>Operating Temperature</b>	-40 to 185°F (-40 to 85°C)	-40 to 185°F (battery: -4 to 140°F) [-40 to 85°C (battery: -20 to 60°C)]
<b>Storage Temperature</b>	-49 to 212°F (-45 to 100°C)	-40 to 257°F (-40 to 125°C)
<b>Operating Humidity</b>	5 to 95% non-condensing	5 to 95% non-condensing
<b>Waterproof</b>	IP67	IP67
<b>Other Data</b>		
<b>Cable Length</b>	14.76' (4.5 m)	9.84' (3 m)
<b>Dimension</b>	2.44" Dia. x 0.83" (62 mm Dia. x 21 mm)	1.4 x 1.65 x 0.6" (36 x 42 x 15 mm)