

GPS Definition

The Global Positioning System (GPS) is a technical marvel made possible by a group of satellites in earth orbit that transmit precise signals, allowing GPS receivers to calculate and display accurate location, speed, and time information to the user.

By capturing the signals from three or more satellites (among a constellation of 31 satellites available), GPS receivers are able to triangulate data and pinpoint your location.

With the addition of computing power, and data stored in memory such as road maps, points of interest, topographic information, and much more, GPS receivers are able to convert location, speed, and time information into a useful display format.

GPS was originally created by the United States Department of Defense (DOD) as a military application. The system has been active since the early 1980s, but began to become useful to civilians in the late 1990s. Consumer GPS has since become a multi-billion dollar industry with a wide array of products, services, and Internet-based utilities.

GPS works accurately in all weather conditions, day or night, around the clock, and around the globe. There is no subscription fee for use of GPS signals. GPS signals may be blocked by dense forest, canyon walls, or skyscrapers, and they don't penetrate indoor spaces well, so some locations may not permit accurate GPS navigation.

GPS receivers are generally accurate within 15 meters, and newer models that use Wide Area Augmentation System (WAAS) signals are accurate within three meters.

While the U.S. owned and operated GPS is currently the only active system, five other satellite-based global navigation systems are being developed by individual nations and by multi-nation consortiums.

GPS Products

- On the Road: Automobiles, Motorcycles, Trucking
- On the Go: Mobile Phones, Laptops, Cameras
- Into Sports: Golf, Running, Cycling
- On the Trail: Handhelds for Hiking, Dog Tracking
- On the Water: Chart Plotters, Sounders, Autopilots, Fish Finders, and More
- In the Air: Flight Decks, Avionics