



## The Possibilities of GPS: a primer.

Imagine being able to find your way, instantly, anywhere in the world, including walking in the wilderness or an unfamiliar city, driving in a car or navigating a boat. Or think of how wonderful it would be to monitor your morning runs using your favorite music player, or to effortlessly pull up images of downtown Paris months after you had taken them. Or imagine locating a lost child in a crowded amusement park, a car parked somewhere in a multi-acre parking lot or a cellular phone caller in distress. The possibilities are endless...



### WHERE AM I

GPS helps you pinpoint your location – imagine you are on your first visit to New York city to meet your relatives; and you were brave enough to try to reach their place on your own. Of course you get hopelessly lost in 5 minutes and call up your relatives. But you need to tell them where you are so that they can help you. One way is of course to ask people. The other is to let technology tell you. If you had a GPS receiver and an electronic map of New York, you need not worry. The device and map will pinpoint your exact location on the map.

### HOW DO I GET THERE

GPS also helps you navigate – figuring out how you will get there from here. Let us go back to your first New York visit. Imagine that you are like the average human being – refusing to ask for directions even when you are hopelessly lost. If you had the GPS device and a detailed map of New York City, you do not need people or relatives to guide you. You could indicate your destination on the map and the device will do the rest. It will automatically find out your current location, trace a path to your destination and provide you turn-by-turn instructions until you reach your destination.

### WHERE IS IT

GPS can help you track where something is – your child, or your imported car or the company truck. The next time you go to the shopping mall, you could strap a GPS-enabled watch on your son's wrist and forget having to run after him. The GPS-enabled watch will keep sending your son's location so that you know where to pick him up after spending a couple of hours browsing books at the bookstore.

### WHAT IS AROUND ME

GPS allows you to map your immediate vicinity or for that matter any other location you might want to review – where is the nearest movie theatre or the restaurant that serves Japanese cuisine. After all the adventure reaching your relatives' place in New York and tracking your son at the shopping mall, you feel like tucking into Japanese food. But how do you know where to go? GPS comes to your rescue again, by providing content around your location. It pinpoints your location, uses location services offered by your cell phone operator to locate the nearest Japanese restaurant, and provides you turn-by-turn directions to get to it.

### WHAT TIME IS IT

GPS provides you accurate time. All GPS receivers synchronize themselves with a family of satellites to a very high precision. These satellites in turn carry expensive and accurate atomic clocks. In essence if you have a GPS receiver, you have a highly accurate and comparatively inexpensive watch.

### SUMMARY

GPS provides instant location information using satellite signals to enable users to ascertain where they are anywhere in the world. It has the potential to help people with a range of location-specific activities, such as finding their way around, locating their loved ones or getting emergency assistance. GPS can be embedded in many consumer and commercial applications such as car navigation systems, cellular phones, fleet management systems, portable entertainment systems, mobile computers, personal/child/asset locators and watches.