

Skylark™

Product Summary

Cloud Corrections

Skylark is Swift Navigation's one-of-a-kind cloud-based GNSS corrections service that delivers affordable, fast, centimeter-level accuracy and eliminates the complexity of integrating high-precision GNSS technology. Skylark was built from the ground-up for autonomy at scale and enables high-precision positioning for mass market automotive and autonomous applications.

Plug-and-Play Positioning

Skylark offers a plug-and-play user experience that delivers fast convergence times required by autonomous solutions. It uses cutting-edge positioning algorithms to provide a continuous stream of data to individual devices from the cloud. This data stream allows for quick and robust positioning and high reliability and availability, even in challenging environments.

Infrastructure as a Service

Unlike existing local GNSS solutions that leave users tethered to base stations, Skylark provides a simple path for customers to achieve centimeter-level accuracy without restrictions. Legacy global solutions that offer high accuracy can require up to 30 minutes of waiting during initialization, while Skylark provides fast initialization, measured in seconds, not minutes. By moving the service to the cloud, Skylark creates a platform for high-precision GNSS navigation of autonomous vehicles, via Internet connectivity. The Skylark end-user experience is further simplified by an online dashboard for fast device registration and management.

High-Precision Corrections

Skylark creates a precise and constantly adapting model of the atmosphere and related errors affecting GNSS. This sophisticated model eliminates dependence on individual base stations and is hosted in the cloud so that accurate correction data can be accessed anywhere within the Skylark network with high availability. Connected users simply turn on their devices to get the data they need.

Integrity and Reliability

Skylark was designed on the principle of fast, simple, high-precision delivered with high integrity, availability and affordability. Building on Swift Navigation's foundation of making GPS positioning technology more accurate and affordable, Skylark maintains low bandwidth to save on data costs and it offers a free 60-day trial.

Scalable

From its GNSS sensor network to its use of the cloud, Skylark is built for scale. The team at Swift utilize a unique approach to processing data with the end result delivering information more efficiently across the network. Swift is integrating and optimizing this information with a team of professionals experienced at building critical infrastructure in the cloud. Skylark delivers speed and simplicity by scaling the science of GNSS positioning as a service, not simply a piece of software.

Easy Monitoring

With its accessible, online dashboard, Skylark allows for fast device registration and the ability to easily manage and monitor network status—available everywhere one has cellular data or Internet connection.

Leverages Swift Technology

Skylark works seamlessly with Swift's multi-band, multi-constellation GNSS receiver, Piksi® Multi and with its ruggedized version, Duro®.

Benefits

- High-Precision GNSS
- 60-Day Free Trial
- Fast Initialization in a Highly-Available Network
- Built From the Ground Up for Autonomy at Scale
- Designed for High Integrity and Availability
- Eliminates Dependence on Individual Base Stations

Features

- Cloud-Based Corrections Service
- Fast Convergence Times, Measured in Seconds
- Centimeter-Accurate Positioning
- State-of-the-Art TLS security and encryption
- Online Dashboard