

TP5790-SWNAV SDK

TP5790-SWNAV High-Precision Smart GNSS Antenna with IMU and L-Band PPP-RTK SDK



📍 TP5790-SWNAV Smart GNSS Antenna | High-Precision | IMU | L-Band PPP-RTK | u-blox ZED-F9R | Complimentary Skylark Trial

Overview

Calian's High-Precision Smart GNSS antennas integrate advanced receivers connecting Position, Navigation, and Timing resources to host systems over robust digital interfaces.

Calian SDK's are a plug-and-play evaluation platform for our Smart Antennas with tools such as: TruPrecision Software, complimentary augmentation subscription services and USB bridge devices, as required, for plug and play operation.

Features:

- MQTT client for PointPerfect PPP-RTK Corrections over L-Band or terrestrial network (sub 6cm accuracy).
- NTRIP client for Swift Navigation Skylark Cx PPP-RTK Corrections (cm-level accuracy).
- Compatible with network and local RTK.
- NMEA monitoring, satellite visibility and signal strength, GNSS status monitoring, Inertial Measurement Unit monitoring and logging tools, with visual state heat-map.
- Status console to pinpoint issues between antenna, corrections and network connections.
- Limited trials for subscription services.
- ROS2® drivers also available (click logo on page 2)
- **Complimentary Trial: Swift Navigation Skylark Cx Precision Positioning Service (6 months)**



Swift Navigation's Skylark® Precise Positioning Service is a global, cloud-based GNSS corrections service that delivers reliable precision continent-wide. Designed to meet diverse application needs, Skylark is available in three distinct variants—Skylark Cx, Nx RTK, and Dx—each optimized for specific use cases, ensuring the right balance of performance and practicality.

Skylark Cx is a PPP-RTK corrections service that delivers uniform centimeter-level accuracy across continents. With 3–7 cm accuracy and a fast convergence time of under 20 seconds, its performance remains consistent, regardless of distance from base stations—providing seamless accuracy at a national and continental scale.

(Learn more about Skylark: Click image below)



3-7 cm accuracy and <20 seconds to fix

PPP-RTK corrections offering uniform performance continent-wide

Corrections data available in both OSR and SSR formats

Optional integrity with error bounding and flagging available

Nation-wide coverage across the US, Canada, UK, EU, China, Japan and Korea

Ideal for automotive, fleet management and outdoor robots

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TP5790-SWNAV High-Precision Smart GNSS Antenna with RTK and IMU SDK

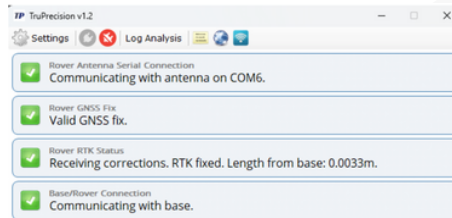
TP5790-SWNAV SDK

What's included:

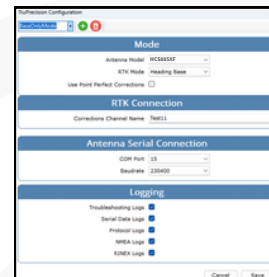
The Calian TruPrecision SDK is a Windows application which provides an autonomous connection to stream Swift Navigation Skylark corrections to the TP5790 Smart Antenna. Additionally, a Virtual COM Port is provided to allow customers to connect to their existing applications within the Calian Smart GNSS Antenna high precision “corrected” position data output. The position data may be either NMEA or UBX formatted messages.



TP5790
Smart GNSS Antenna



TruPrecision
Software



TruPrecision Software
Configuration



TP5790 SDK includes:

- Calian TP5790 Smart GNSS High-Precision (IMU) Antenna
- Calian 1 x 23-0067-14: 10 cm ground plane (see ordering information)
- Calian TruPrecision Application for correction streaming
- Complimentary corrections services trials (see feature list on page one)

Ordering Information:

- **33-TP5790SDK-SWNAV-1:** (USB)(33-5790-19-10-0S USB)
- **33-TP5790SDK-SWNAV-2:** (RS-232)(33-5790-29-10-05-PC0 + 33-0095-16)



Complimentary Corrections Trials



Receivers



ROS2® Drivers
(Click logo)

About Calian

We keep the world moving forward. Calian® helps people communicate, innovate, learn and lead safe and healthy lives. Every day, our employees live our values of customer commitment, integrity, innovation and teamwork to engineer reliable solutions that solve complex problems. That's Confidence. Engineered. A stable and growing 40-year company, we are headquartered in Ottawa with offices and projects spanning North American, European and international markets. Visit calian.com to learn about innovative healthcare, communications, learning and cybersecurity solutions.