**Multi-Band, Multi-Constellation Centimeter-Accurate GNSS**

The Piksi Multi GNSS receiver from Swift Navigation. Its dual-frequency operation offers fast RTK convergence times and reliable, centimeter-accurate results at a breakthrough price.

**Centimeter-Level Accuracy**

Autonomous devices require precision navigation—especially those that perform critical functions. Swift Navigation solutions utilize real-time kinematics (RTK) technology, providing location solutions that are 100 times more accurate than traditional GPS.

**Fast Convergence Times**

Multiple signal bands enable fast convergence times to high-precision mode. Single band RTK systems converge in minutes, while Piksi Multi converges to a high-precision solution within seconds. This allows for much faster system start times, as well as faster reacquisition, critical to robotic systems.

**Robust Positioning Performance**

Piksi Multi supports GPS L1/L2 and is hardware-ready for simultaneous reception of the other three global GNSS constellations: GLONASS, BeiDou and Galileo. These additional constellations will create much more robust positioning performance, in a variety of challenging skyview environments. Integrated MEMS oscillator technology enhances robustness under vibration and shock. Integrated MEMS IMU technology allows for sensor fusion techniques that enhance positioning performance.

**Open Platform**

Piksi Multi features a powerful Xilinx Zynq® processor with an FPGA and dual-core ARM® Cortex®-A9 processors. Plenty of computational headroom and on-board Linux enable seamless integration of customer applications.

**Rapid Prototyping**

Piksi Multi is designed to be easy to use. The Piksi Multi Evaluation Kit includes: 2 Piksi Multi GNSS Modules; 2 integrator-friendly Evaluation Boards; 2 GNSS survey grade antennas; 2 powerful radios and integration accessories. Piksi Multi features multiple high-density I/O connectors, providing an enhanced and improved integration experience.

**Breakthrough Price**

Swift Navigation is built on the notion that highly-precise RTK solutions should be offered at an affordable price. Piksi Multi embraces the foundation of unmatched affordability and is available at a much lower cost than comparable systems.

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**Benefits**

- Fast RTK Convergence Times
- Highly-Competitive Pricing
- Easy Integration into a Variety of Applications
- Future-Proof Hardware with In-Field Software Upgrades
- Onboard Linux Allows Flexibility

**Features**

- Dual Frequency
- Up to 20 Hz Solution Rate
- Advanced MEMS Oscillator Technology
- On-Board MEMS IMU and Magnetometer
- Flexible Interfaces Including UART, Ethernet, CAN and USB
- 32 User-Definable GPIO Pins for Customization
Planned release for GLONASS in late 2017. Hardware-ready for GLONASS G1/G2, BeiDou B1/B2, Galileo E1/E5b, QZSS L1/L2 and SBAS (Satellite Based Augmentation Systems such as WAAS, EGNOS, MSAS, GAGAN and SDCM). Piksi Multi GNSS Module has the RF front end to receive these signals but there are no precise implementation dates for future satellite systems. This information is intended as informative only for systems integrators who intend to select the product over a long integration timeline.

First release will support up to 10 Hz.

As required by the U.S. Department of Commerce to comply with export licensing restrictions.

Typical power consumption by module in L1/L2 RTK positioning mode.

The use of an on-board heat sink may be required in some cases. The module ships with a provided heat sink attachment.

In open sky and strong signals conditions.

Hot Start is the time taken by the receiver to achieve a standard position fix after a brief outage. For example, the time taken to fix a position for a car that is exiting a long tunnel.

Cold Start is the time taken by the receiver to achieve a standard position fix after a prolonged outage. For example, the time taken to achieve a position fix for a car that has been parked overnight in a garage and once it sees the sky view for the first time.

Reacquisition is defined as the time taken to re-acquire position lock after brief moment of outage. For example, a car traveling under a freeway / highway overpass.

Visit the Swift online store at www.swiftnav.com

Piksi Multi Evaluation Kit
Designed to provide a seamless easy-to-use RTK positioning experience through a single kit consisting of 2 Piksi Multi GNSS Modules; 2 Evaluation Boards; 2 GNSS survey grade antennas; 2 powerful radios and all other required integration accessories.

Piksi Multi GNSS Receiver Pack
Quick integration packs designed both for customers seeking to create custom RTK solutions for unique projects or for seasoned RTK systems integrators.

Piksi Multi GNSS Module
Designed for the experienced systems integrator and the large volume enterprise customer.