Piksi Multi Firmware 2.4.20
Release Notes

Version 1
2022-05-17

Introduction

Swift Navigation provides the Piksi® Multi firmware release v2.4.20 with a correction for a leap second handling issue. This firmware can be used on Piksi Multi, Duro® and Duro Inertial products.

Details

The leap second information is broadcast by the GPS satellites in the navigation data stream up to six months prior to the leap second change event. The issue in the older firmware manifests as applying the leap second information as soon as it is received, rather than waiting for a specified leap second date. This could result in incorrect (by one second) UTC time being output from the Piksi Multi / Duro prior to the intended leap second change moment. This v2.4.20 release corrects this issue.

The International Earth Rotation and Reference Systems Service has announced that there will be no leap second change in the world's official timekeeping in June 2022. It is possible—though unlikely—that there will be a leap second change in December 2022. In the event of a leap second change in December 2022, the Piksi Multi firmware leap second issue could manifest as early as July 2022. It is recommended that users upgrade their firmware prior to July 2022 in order to be sure to avoid any symptoms of this issue.