

# Hemisphere and Carlson Launch GNSS Receiver



Hemisphere GNSS and Carlson Software recently collaborated to produce the Hemisphere S321 and Carlson BRx6, all-new, compact, GNSS receivers that are designed for the requirements and workflows of their customers' daily projects.

The S321 and BRx6 receivers are optimised for land surveying, construction fieldwork, and marine operations. Design and production of the new receiver focused on creating a lightweight and compact receiver with an intuitive interface and access to multiple satellite constellations – including GPS, GLONASS, BeiDou, and Galileo. The receivers also incorporate RTK and L-band corrections, including optimisation for Hemisphere's subscription-based, Atlas GNSS Global Correction Service.

The two companies previously worked together on the design and production of Carlson's BRx5 GNSS receiver (Hemisphere S320), developed using Carlson's software and interface expertise with Hemisphere's design and manufacturing experience and RTK correction technology leadership.

## Light, Lighter

There are more satellite constellations available now and more RTK correction services. They can be used together to provide better accuracy and more efficient fieldwork, according to Carlson's director of special projects Karl Nicholas. Receivers today are lighter than they were five years ago and customers in surveying and construction tell Carlson they want receivers that are even lighter, more compact and sturdier.

The receiver is based on Hemisphere's RTK engine Athena and is designed to efficiently process multiple constellations and Atlas correction signals, resulting in both high-accuracy and robust performance. Together with Hemisphere's BaseLink technology and a new webUI, the S321/BRx6 has during tests proven to function as a powerful rover or base station, even in locations where control points are not available.

## More Productive Surveyors

Hemisphere's senior product manager Lyle Geck adds that BaseLink brings simplicity and freedom to setting up the S321 or BRx6 as a base station. Expertise with RTK algorithms and L-band corrections was a primary reason Carlson sought out Hemisphere as a manufacturing partner.

Several features of the new receiver, including the new SureFix technology, were specifically designed to make surveyors more productive in the field or on construction sites. In multi-path conditions, position reliability will often degrade. SureFix uses proprietary algorithms and various inputs to give a reliable 'quality indicator' for particular points.

Both Hemisphere GNSS (hall A1, stand F1.013) and Carlson Software (hall A3, stand D3.051) are showcasing their GNSS receivers at Intergeo in Hamburg, Germany, from 11-13 October 2016.