

Bluetooth GNSS Receiver Utilising GPS and GLONASS with SBAS



The SXBlue II GNSS from Geneq, Canada, is a GNSS receiver that uses both GPS and GLONASS with SBAS (WAAS/ EGNOS/ MSAS/ GAGAN) to attain 30cm/1ft (RMS) accuracy in real-time using free SBAS corrections. It connects through Bluetooth to any smartphone, handheld, tablet computer or notebook computer.

For years, the SXBlue GPS product line has lead the market in squeezing the most out of SBAS for high-precision mapping and surveying users. New technology used in the SXBlue II GNSS allows it to utilize both GPS and GLONASS with SBAS, enabling it to track and use nearly twice as many satellites compared to typical SBAS receiver technology. Product engineer Jean-Yves Lauture adds that more satellites means more accurate positioning in tougher environments, such as under tree canopy and near

buildings. GLONASS with SBAS provides according to him impressive accuracy and tracking results.

The SXBlue II GNSS builds on the success of the proven SXBlue II GPS that was designed to optimise SBAS performance under tree canopy and in rugged terrain. With the ability to track 55 satellites (31 operational GPS, 24 operational GLONASS), the SXBlue II GNSS uses between 12 and 19 satellites in view at any time, providing superior performance when working under and around tree canopy, buildings and rugged terrain.

The next-generation SXBlue II GNSS is the same, small, palm-sized unit as the SXBlue II GPS and utilises a small 2.7" diameter GNSS antenna. The unit is waterproof (submersible), dustproof and ruggedised, with an IP-67 rating. Its Class-1 long-range Bluetooth 2.0 has a typical range of 250 metres. The internal, rechargeable, field replaceable Li-Ion battery has on-board LEDs let the user know how much battery life is left. The operating temperature range of the SXBlue II GNSS is -40°C (-40°F) to 85°C (185°F).

In addition to the built-in long-range Bluetooth transceiver, the SXBlue II GNSS also has a standard DE-9 RS-232 port and a USB Type B port whose outputs are fully programmable up to 10Hz standard, and a 20Hz option. Other optional features are L1 RTK for <2cm real-time accuracy and base station RTCM output.

There is no need for post-processing or other sources of differential corrections as the SXBlue II GNSS uses WAAS (North America), EGNOS (Europe), MSAS (Japan) and GAGAN (India) satellite corrections. Users receive real-time, 30cm/1 foot positioning all day long.

Geneq is showing the SXBlue II GNSS at the Esri International User Conference, taking place from 24 to 26 July 2012 in San Diego, California, booth #1203.