

# iSXBlue II<sup>+</sup> GNSS



## The best of the best High-Accuracy GNSS Receiver Designed Specifically for the iPad/iPhone

*The iSXBlue II<sup>+</sup> GNSS is a palm-sized receiver that delivers real-time, high accuracy performance using GPS/GLONASS satellites and free SBAS corrections for your iPad/iPhone. It's battery-powered lightweight design makes it the ideal choice of a variety of mapping apps including GIS, Forestry, Mining, Utilities, Agriculture, Surveying and Environmental, at a price you can afford.*

### Go Real-time, All the Time with your iPad/iPhone!

The iSXBlue II<sup>+</sup> GNSS uses innovative technologies that delivers high accuracy in real time, all the time. There is no need for post processing or other correction source when SBAS (WAAS, EGNOS, MSAS or GAGAN) are available. Utilizing both GPS and GLONASS satellites, the iSXBlue II<sup>+</sup> GNSS will work where GPS receivers struggle, such as in the forest, around buildings and other difficult mapping environments. The iSXBlue II<sup>+</sup> GNSS is designed to work where you need to work; in the forest or in the city, all day long.

### GPS + GLONASS + SBAS = Revolutionary iSXBlue II<sup>+</sup> GNSS Receiver

Until now, SBAS users couldn't enjoy the tremendous benefit offered by adding GLONASS satellites since SBAS doesn't support GLONASS. However, new technology employed by the iSXBlue II<sup>+</sup> GNSS allows it to use both GPS and GLONASS satellites for high-performance, real-time mapping accuracy using SBAS. No post-processing is needed to achieve the accuracy you expect.

### Work in More Places than Ever Before

We've heard it over and over. Once you start using GLONASS, you'll be addicted. By using GLONASS

satellites, your productivity immediately improves. With both GPS and GLONASS satellites, you'll have nearly twice as many satellites in view, meaning you won't have to wait for the high accuracy data you want. The iSXBlue II<sup>+</sup> GNSS maximizes your productivity by working directly within your iOS application such as Esri's Collector for ArcGIS, ArcGIS for iOS, TerraGo, Amigo, Cloud, iGeoTrack, ICMT Gis, Fulcrum, etc.

### A Long Term Solution

Because the iSXBlue II<sup>+</sup> GNSS doesn't have a built-in computer, it can't become obsolete. On one project, connect it to your iPhone. On the next project, connect it to your iPad. Android? Windows Mobile? Yes, the iSXBlue II<sup>+</sup> GNSS is compatible with those mobile devices too. It just keeps delivering high accuracy positioning to whichever device you want to connect to it using Bluetooth, mini USB or RS-232.

### Key Features:

- 100% iPad / iPhone Compatible
- Win Mobile / Android Compatible
- SBAS support for GPS and GLONASS
- High accuracy
- Beidou / Galileo / QZSS Ready

# Specifications

## GNSS Sensor

Receiver Type:	L1/G1, GPS + GLONASS with carrier smoothing (BeiDou, Galileo and QZSS optional)
Channels:	372 channels
SBAS Support:	3-channel, parallel tracking WAAS, EGNOS, MSAS, GAGAN SBAS ranging
GPS Sensivity:	-142 dBm
Update Rate:	1 Hz (optional 10 or 20 Hz)
DGNSS Horizontal Accuracy:	< 60cm 2dRMS, 95% confidence <sup>1</sup> (< 30cm HRMS, < 25cm CEP)
Horizontal Accuracy:	< 2.5m 2dRMS, 95% confidence (autonomous, no SA) <sup>2</sup>
Optional Proprietary RTCM:	< 20cm 2dRMS, 95% confidence <sup>3</sup>
Optional RTK:	1 to 3cm + 1 ppm (Horizontal) <sup>1</sup> 2 to 6cm + 1 ppm (Vertical) <sup>1</sup>
Cold Start:	60 sec typical (no almanac or time)
Reacquisition:	< 1 sec
Maximum Speed:	1 850 kph / 1 150 mph / 999 knots
Maximum Altitude:	18 288m (60 000 ft)
<b>Post-processing:</b>	
Horizontal Accuracy1:	5 mm + 0.5 ppm (Static) or better 10 mm + 1 ppm (Kinematic) or better
Vertical Accuracy1:	5 mm + 1.0 ppm (Static) or better 20 mm + 1 ppm (Kinematic) or better

## Communication

Port:	Bluetooth 2.1, RS-232C USB 2.0
Bluetooth Transmission:	Class 1 (Long Range) iAP and 2.1 EDR
Fully Bluetooth pre-qualified:	Bluetooth 2.1 Apple-approved, authenticated
Baud Rates:	4 800 to 115 200
Data I/O Protocol:	NMEA 183, RTCM 104, Binary
Timing Output:	1 PPS (HCMOS, active high, rising edge sync, 10 pF load
Raw Measurement Data:	Binary (free RINEX utility)
Correction I/O Protocol:	RTCM , ROX Format, RTCM V 2.3, RTCM V 3.2 CMR, CMR+
Led mode indicators:	Power, lock, DGPS position DIFF lock, Bluetooth connection
Battery Status LED:	5 LED's bar graph

## Power

Battery Type:	Field replaceable Lithium-Ion pack (Rechargeable inside unit or separately)
Battery Capacity:	3,900 mAh. 7.2V
Battery Life:	+ 8 hours
Power Consumption:	< 3.5W
Charging Time:	4 to 5 hours (with supplied charger)
Antenna Voltage Output:	5 VDC
Antenna Input Impedance:	50 Ohms

## Environmental

Operating Temperature:	-40°C to +85°C (-40°F to +185°F) <sup>5</sup>
Storage Temperature:	-40°C to +85°C (-40°F to +185°F)
Humidity:	95% non-condensing
Compliance:	FCC, CE, RoHS and Lead-free

## Mechanical

Enclosure Material:	Re-enforced Nylon
Battery Case Material:	ABS
Enclosure Rating:	Waterproof, IP-65
Enclosure Dimensions:	14.1 x 8.0 x 4.7 cm (5.57 x 3.15 x 1.85 in.)
Weight:	487g (1.07 lb)
Data Connectors:	DB-9 Female USB Type B Female
Antenna Connector:	SMA Female

## Antenna

Frequency Range:	L1, G1, L-Band (1525 MHz - 1,607 MHz)
Gain (without cable):	26 dB (+/- 2 dB), 35 mA
Voltage:	+ 4.5 to 15 VDC
Impedance:	50 Ohms
Dimensions:	6.6 diam. x 2.7 cm (2.61 x 1.05 in.)
Weight (without cable):	114g (0.25 lbs) (with removable magnet mount)
Antenna Connector:	SMA Female
Temperature:	-55°C to +70°C (-67°F to +158°F)
Humidity:	Immersion 1 meter

## Standard Accessories

- iSxBlue II+ GNSS Receiver
- Li-Ion Battery Pack (Field replaceable)
- Li-Ion Charger
- Belt/Shoulder Carrying Case
- Precision Antenna with 1.5m cable
- Soft Hat for antenna
- RS-232 Cable (6 ft.)
- USB Type A/B Cable (6 ft.)

## Field Activated Options

- 10Hz Output Rate

## NOTES :

1. Depends on multipath environment, number of satellites in view, satellite geometry, baseline length (for local services) and ionospheric activities.
2. Depends on multipath environment, number of satellites in view, satellite geometry and ionospheric activities.
3. Option required on both base and rover. Also requires communication link between base and rover.
4. Transmission in free space.
5. Lithium- Ion battery performance degrades bellow -20°C (-4°F)

© Copyright June 2015, Geneq inc. All rights reserved. Specifications subject to change without notice. The Bluetooth™ trademarks are owned by Bluetooth SIG, Inc, U.S.A. Made in Canada.



10700, Secant St., Montreal  
(QC), H1J 1S5, Canada  
P: +1.514.354.2511  
1.800.463.4363 (Canada and USA)  
F: +1.514.354.6948 E: info@geneq.com

Authorized Distributor