

SXblue

II+ GNSS



The best High-Accuracy GNSS Receiver



The SXBlue II+ GNSS S is a palm-sized receiver that delivers real-time, high accuracy performance using GPS/GLONASS/Beidou satellites and free SBAS corrections for your device. Its battery-powered lightweight design makes it the ideal choice for 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!

The vXBlue II+ GNSS uses innovative technologies that deliver high accuracy in real time, all the time. Utilizing both GPS and GLONASS satellites, the SXBlue II+ GNSS will work where GPS receivers struggle, such as in the forest, around buildings and other difficult mapping environments.

GPS + GLONASS + SBAS = Revolutionary SXBlue II+ 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 SXBlue II+ 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 SXBlue II+ 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 GS, Fulcrum, etc.

Coast and SureTrack maintain sub-meter DGNS positioning for 40 minutes after correction loss.

A Long Term Solution

Because the SXBlue II+ GNSS doesn't have a built-in computer, it can't become obsolete. On one project, connect it to your Android. On the next, connect it to your Windows Mobile!

Key Features

- 100% Windows Mobile and Android compatible
- SBAS support for GPS and GLONASS
- Accuracy of 60 cm, 95 % of the time
- Multi-constellation performance
- USB and RS-232 ports

SPECIFICATIONS

GNSS SENSOR

Receiver type	GNSS (GPS/GLONASS/Beidou) L1 with carrier phase
Channels	162
SBAS Support	3 channels parallel tracking WAAS/EGNOS/MSAS/GAGAN (with SBAS ranging)
GPS Sensitivity	-142 dBm
Update Rate	1 Hz (optional 10 or 20 Hz)
DGNSS Horizontal Accuracy	< 60 cm 2dRMS, 95 % confidence ¹ (< 30 cm HRMS, < 25 cm CEP)
Autonomous	< 1.2 m 2dRMS, 95 % confidence (autonomous, no SA) ²
Optional RTK	10 mm + 1 ppm (Horizontal) ¹ 20 mm + 2 ppm (Vertical) ¹
Cold Start	60 sec typical (no almanac or time)
ReacquSition	< 1 sec
Maximum Speed	1,850 kph / 1,150 mph / 999 knots
Maximum Altitude	18,288 m (60,000 ft)
Post-processing Horizontal Accuracy ¹	5 mm + 0.5 ppm (Static) or better 10 mm + 1 ppm (Kinematic) or better
Vertical Accuracy ¹	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 TransmSsion	Class 1 (Long Range) iAP2 and 2.1 EDR
Fully Bluetooth pre-qualified	Bluetooth 2.1
Baud Rates	4,800 to 115,200
Data I/O Protocol	NMEA 0183, RTCM 104, Binary
Timing Output	1 PPS (HCMOS, active high, rSing 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

FIELD ACTIVATED OPTION

- 10 Hz or 20 Hz Output rate
- RTK

NOTES :

¹ Depends on multipath environment, number of satellites in view, satellite geometry, baseline length (for local services) and ionospheric activities. Stated accuracies for baseline lengths of up to 50 km.

² TransmSsion in free space.

³ Lithium-Ion battery performance degrades below -20°C (-4°F).

POWER

Battery type	Field replaceable Lithium-Ion pack (Rechargeable inside unit or separately)
Battery capacity	3,900 mAh 7.2 V
Battery life	+ 8 hours ³
Power Consumption	< 3.5 W
Charging time	5 hours (with supplied charger)

ENVIRONMENTAL

Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
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, IP65
Dimensions	14.1 cm x 8.0 cm x 4.7 cm 5.57 in x 3.15 in x 1.85 in
Weight	487 g (1.07 lbs)
Data Connectors	DB-9 female, USB Type B female
Antenna connector	SMA female
Drop ResStance	Designed to withstand 1 m drop

ANTENNA

Frequency Range	L1, G1, L-Band (1,525 MHz - 1,607 MHz)
Gain	26 dB (+/- 2 dB), 35 mA
Voltage	+ 4.5 to 15 VDC
Impedance	50 Ohms
Dimensions	6.6 cm x 2.7 cm (2.6 in x 1.05 in)
Weight (without cable)	114 g (0.25 lbs) (with removable magnet mount)
Antenna Connector	SMA Female
Temperature	-55 °C to +70 °C (-67 °F to +158 °F)
Humidity	Waterproof

STANDARD ACCESSORIES

- Li-Ion Battery Pack (Field replaceable)
- Li-Ion Charger
- Belt/Shoulder Carrying Case
- Soft Hat for antenna
- PrecSion Antenna with 1.5 m cable
- 1.8 m RS-232 Cable
- 1.8 m USB Type A/B Cable

Authorized DStributor