

The Ultimate Multi GNSS with L-Band Receiver Designed for Agriculture, Machine Control and Base Stations















- GPS, GLONASS, Galileo, BeiDou, QZSS and SBAS
- Triple-frequency L1-L2-L5.
- Bluetooth connectivity and RS-232
- 1 cm RTK accuracy, long-range RTK baseline with fast acquisition time.
- aRTK<sup>™</sup> and Tracer<sup>™</sup> provide positioning sustainability if the GSM fails.
- Atlas<sup>™</sup> Global satellite correction service.
- Update rate up to 50 Hz (option)

Powered by its 394 channels, the SXblue Platinum AG uses all-in-view constellations with triple frequency and it offers the ability to use a global or local corrections (SBAS, Atlas and RTK).

The new receiver is compact, lightweight, completely dustproof and ruggedized.

With the scalable SXblue Platinum AG Basic, the user can activate at anytime any options after its initial purchase. The receiver is also field upgradable which, means that you can activate these options remotely at your convenience.

Atlas delivers its correction signals via L-band or it can stream data over the internet (NTRIP) at accuracies ranging from meter to subdecimeters levels ensuring the best available vertical and horizontal accuracy.

With a wide variety of compatible software, our team can help you choose the perfect solution for your applications such as precision agriculture, machine control, forestry operations, permanent base stations and surveying.

# **SPECIFICATIONS**

### **RECEIVER**

| Type                 | GNSS triple-frequency RTK with carrier phase   |
|----------------------|--|
| Signal               | GPS - L1CA, L1P, L1C, L2P, L2C, L5<br>GLONASS - G1, G2, P1, P2<br>BeiDou - B1, B2<br>Galileo - E1BC, E5a, E5b<br>OZSS - L1CA, L2C, L5, L1C |
| Channels             | 394  |
| SBAS                 | 3 satellites parallel tracking<br>WAAS/EGNOS/MSAS/GAGAN  |
| L-Band - Atlas       | Single channel   |
| Update rate          | 1 Hz (option 10 Hz, 20 Hz and 50 Hz)   |
| RTK Accuracy         | 8 mm + 1 ppm (RMS) Horizontal  |
| SBAS Accuracy        | < 30 cm HRMS <sup>1</sup>  |
| Autonomous Accuracy  | 1.2 m HRMS <sup>1</sup>  |
| Cold start           | < 60 sec (typical no almanac or RTC)   |
| Reacquisition        | < 1 sec  |
| Max speed            | 1850 kph (999 knots)   |
| Max altitude         | 18 288 m (60 000 ft)   |
| Differential options | SBAS Autonomous, External RTCM, RTK, L-Band (Atlas) DGPS   |
|                      |  |

### **POWER**

| Input Voltages                 | 12 VDC (9 to 18 VDC), or                             |  |
|--------------------------------|--|--|
|                                | 24 VDC (18 to 36 VDC                                 |  |
| Average Power<br>Consumption   | 5 Watts  |  |
| Average Current<br>Consumption | 420 mA @ 12 V (5 Watts)<br>195 mA @ 24 V (4.7 Watts) |  |
|                                |  |  |

### **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      |

### STANDARD ACCESSORIES

- 3 m Cable Fused Power
- RS-232 Cable (6 ft)
- L1/L2 Antenna with 3.5 m cable







Survey Antenna (option)

## COMMUNICATION

| Ports                   | Bluetooth 2.0, RS-232C                        |
|-------------------------|---|
| Bluetooth               | Class 1 (Typical range of 250 m) <sup>2</sup> |
| Baud rates              | 4800 - 115200                                 |
| Data I/O formats        | NMEA 0183, Binary                             |
| Timing Output           | Free option, available on request             |
| Event Marker Input      | Free option, available on request             |
| Raw Measurement Data    | Binary (Free RINEX utility)                   |
| Correction I/O Protocol | RTCM 2.3, RTCM 3.2, CMR,<br>CMR+, ROX Format  |

### **MECHANICAL**

| Enclosure material   | Environmentally sealed powder-coated aluminium |
|----------------------|--|
| Enclosure rating     | Waterproof, IP67                               |
| Immersion            | 30 cm, 30 minutes                              |
| Overall Dimensions   | 14.20 x 8.54 x 3.53 cm (5.59 x 3.36 x 1.39 in) |
| Enclosure Dimensions | 11.26 x 8.54 x 3.53 cm (4.43 x 3.36 x 1.39 in) |
| Weight               | 268g (0.6 lbs)                                 |
| Data Connectors      | 3-pin weathertight                             |
| Antenna connector    | BNC Female, straight                           |
| S                    |  |

### STANDARD GNSS ANTENNA

| GNSS Freq Range    | L-Band, GPS L1 : 1.525 – 1.610 MHz;<br>GPS L2 : 1.217 – 1.260 MHz |
|--------------------|---|
| Impedance          | 50 Ohms   |
| Gain               | 28 dB ± 2 dB  |
| Noise Figure       | 2.5 dB  |
| Voltage/Current    | +4.5 to +5.5 Vcc  |
| Connector          | SMA female  |
| Dimensions (H x D) | 26.6 mm x 66.3 mm (0.86 in x 2.6 in)                              |
| Weight             | 125 g (0.363 lb)  |
| Temperature        | -55°C to +70°C (-67°F to +158°F)                                  |
| Humidity           | Waterproof  |

### FIELD ACTIVATED OPTION

- 10 Hz Output Rate
- 20 Hz Output Rate
- 50 Hz Output Rate
- Multi-GNSS
- Multi-frequency
- Atlas Service Correction

Authorized Distributor

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<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> Transmission in free space.