



# SL Pro GNSS Receiver

A complete, rugged GNSS position solution for autonomy

The SL Pro receiver offers a robust position solution for all autonomy applications, including under trees and in urban canyons.

The all-in-one solution includes a phase matched antenna for peak performance and robustness of solution.

## Fully Unlocked!

No nickel and diming here! All SL receivers are fully unlocked out of the box and ready for RTK and PPP.

## FE - Precise Point Positioning (PPP) Corrections

FE PPP provides a solution that covers entire continents<sup>1</sup>. Using either L-Band satellite or internet based solution to receive the FE correction. Sub 4" (10cm) precision without the need for a base station or tower network. Load and Go FE allows you to purchase monthly subscriptions directly from Seirrowon with your phone or tablet. No more calling the dealer then waiting on activation.

## B.Y.O. Cell Connection

You know the best Cell provider in your area. Why be forced to use a different carrier? Either use your phone as a hot spot or use a rugged hot spot solution for RTK or FE corrections.

## Advanced User Interface

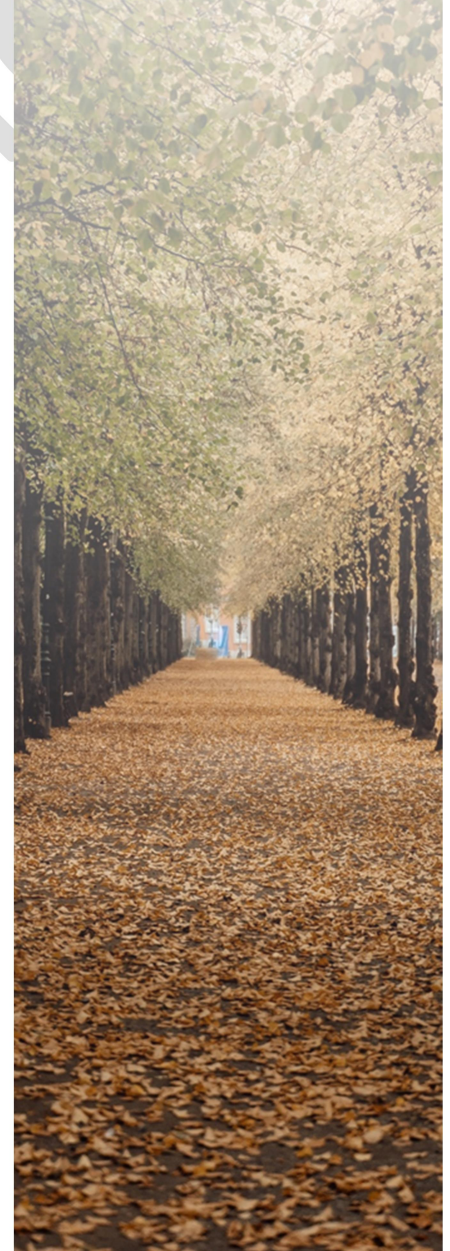
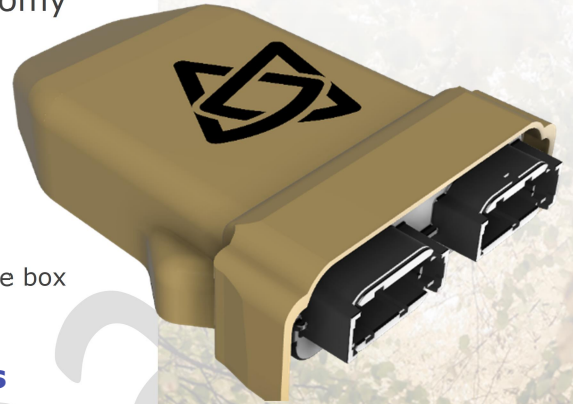
Built in Web page allows set up with any WIFI device (phone, tablet, or PC). No cables or set up software required. Presets allow quick, automatic configuration of new receivers when replacing older ones.

## Remote Support

Via WIFI, the SL Receiver can send its settings directly to Seirrowon secured server allowing a replacement unit to be pre-configured before shipment. Remote diagnostics also allow for fast diagnosis of issues.

## Integrated Sensor Fusion

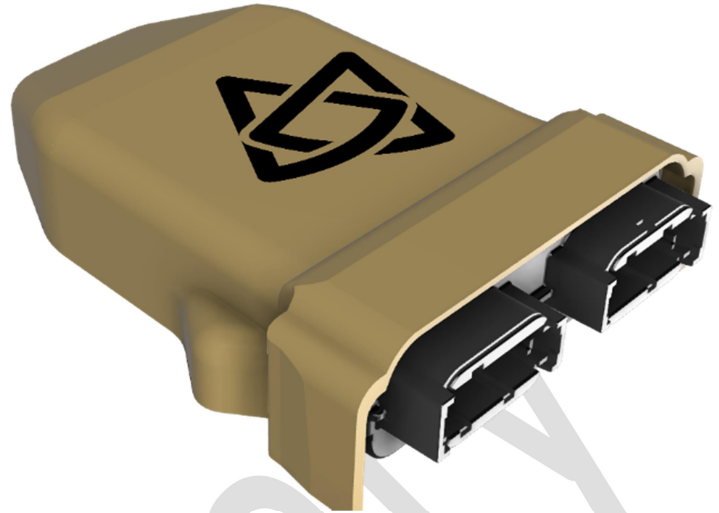
Integrated Sensor Fusion creates a robust solution for densely treed areas and urban canyon conditions, functioning even when GNSS is obstructed<sup>2</sup>.



1. FE PPP currently covers North America and Europe only. Other continents will follow.  
2. Performance of sensor fusion will degrade over time without GNSS

## Seirrowon Labs GNSS Offering

|                              | SL Lite<br>10Hz | SL Lite R<br>20Hz | SL Pro<br>20Hz |
|------------------------------|-----------------|-------------------|----------------|
| <b>GNSS Output Rate</b>      |                 |                   |                |
| GPS L1, L2C                  | ✓               | ✓                 | ✓              |
| GLONASS L1, L2               | ✓               | ✓                 | ✓              |
| Galileo E1, E5a              | ✓               | ✓                 | ✓              |
| Beidou B1, B2                |                 | ✓                 | ✓              |
| QZSSL1, L2C                  |                 | ✓                 | ✓              |
| L-band PPP                   |                 |                   | ✓              |
| <b>PPP over IP</b>           | ✓               | ✓                 | ✓              |
| <b>Sensor Fusion</b>         |                 |                   |                |
| Basic                        |                 | ✓                 |                |
| Advanced                     |                 |                   | ✓              |
| <b>Remote Backup</b>         | ✓               | ✓                 | ✓              |
| <b>Remote Support</b>        | ✓               | ✓                 | ✓              |
| <b>Simulated Radar</b>       | ✓               | ✓                 | ✓              |
| <b>PPS</b>                   | ✓               | ✓                 | ✓              |
| <b>WIFI</b>                  | ✓               | ✓                 | ✓              |
| <b>Bluetooth</b>             | ✓               | ✓                 | ✓              |
| <b>Simple User Interface</b> | ✓               | ✓                 | ✓              |
| <b>NTRIP Client</b>          | ✓               | ✓                 | ✓              |



## Receiver Specifications

|                 |                                  |             |
|-----------------|----------------------------------|-------------|
| <b>Signals</b>  | 185 Channel                      |             |
| GPS             | L1, L2C                          |             |
| GLONASS         | L1, L2                           |             |
| Galileo         | E1, E5B                          |             |
| Beidou          | B1, B2                           |             |
| QZSS            | L1, L2C                          |             |
| L-Band          | 1 Channel (PPP)                  |             |
| <b>Accuracy</b> | <b>Static</b>                    | <b>P2P</b>  |
| Stand Alone     | 5ft (1.5m)                       | 12in (30cm) |
| SBAS            | 3.3ft (1m)                       | 8in (20cm)  |
| PPP             | 4in (10cm)                       | 1in (2.5cm) |
| RTK             | 1in (2.5cm)                      | 1in (2.5cm) |
| Tilt            | +/- 1in (2cm) at 6.7ft (2m) High |             |

|                         |                                                                              |
|-------------------------|------------------------------------------------------------------------------|
| <b>L-Band Receiver</b>  |                                                                              |
| Type                    | Single Channel                                                               |
| Frequency               | 1525 - 1559 MHz                                                              |
| Acc Time                | 10s                                                                          |
| <b>Output Rate</b>      | 20 Hz                                                                        |
| <b>Sensor Fusion</b>    | GNSS Embedded                                                                |
| <b>TTFB</b>             | < 10s                                                                        |
| <b>Correction Types</b> | RTCM3.x, RTCM2.x and PPP                                                     |
| <b>Connectivity</b>     | 2 x Serial Ports<br>Wi-Fi 802.11 b/g/n<br>Bluetooth v4.2 BLE<br>PPS or Speed |
| <b>User Interface</b>   | Web UI                                                                       |
| <b>LEDs</b>             | Power, GNSS, Correction, and Wi-Fi/Bluetooth                                 |

### Updates Support

Via Internet  
User-enabled Support  
Backup and Historical  
Diagnostic Information

### Operating Characteristics

|             |                                     |
|-------------|-------------------------------------|
| Temperature |                                     |
| Operation   | ~ -22°F (-30C) – 170°F (76C)        |
| Storage     | ~ -40°F (-40C) - 185°F (90C)        |
| Shock       | TBD                                 |
| IP Rating   | IP67                                |
| Humidity    | 100%                                |
| Vibration   | TBD                                 |
| Electrical  | 9 – 32vDC                           |
| Power       | < 1W                                |
| Dimensions  | 5"W(125mm)x7"L(175mm)x<br>2"H(50mm) |

### Connectors

|             |                    |
|-------------|--------------------|
| Connector 1 | DTM – A Key 12 pin |
| Connector 2 | DTM – B Key 12 pin |

### Mounting

|              |                      |
|--------------|----------------------|
| Magnetic     | 48 lbs. (21kg) force |
| Screw Option | 3 x M3 screws        |

### Other Features

NTRIP Client Built-in  
Direction and speed inputs  
PPP over IP Client Built-in

American Designed and  
Assembled



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Version 0.7 9/20/21