

# simpleGNSS Pro

Includes:

- 1 simpleGNSS Pro board (NEO-F10N)



More info about the product!



simpleGNSS Pro has several different configurations to provide you with flexibility:

SKU	Variation Name
AS-GNSS-F10N-L1L5-NH-00	Without headers
AS-GNSS-F10N-L1L5-HS-00	Headers soldered (+26€)

Get a discounted bulk price on this product for orders of 50 units or more. Contact us at [info@ardusimple.com](mailto:info@ardusimple.com) to get a quote.

## Description

simpleGNSS Pro allows you to evaluate sub-meter dual band (L1/L5) GNSS positioning technology. It's based on u-blox NEO-F10N and can be used standalone. Or connected with Arduino, Ardupilot / Pixhawk (JST connector), Raspberry Pi, Nvidia, STM32 and ESP32 platforms, as a shield. It can provide up to 10 positions every second.

This board is ideal for vehicle and object tracking, especially if you need to improve the GPS accuracy from the traditional 2-3 meters to sub 1 meter.

More details available in the Specification and Documentation tabs.

Good to know:

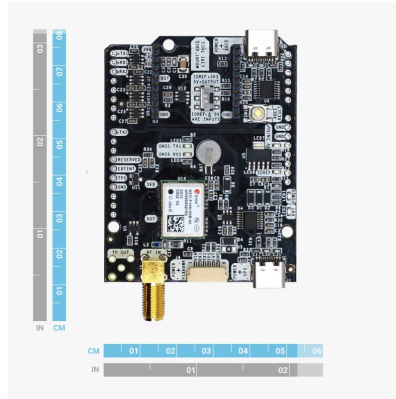
- This product doesn't do RTK.
- This product is compatible but doesn't include multiband GNSS antenna, which is necessary to use the product.
- The module will not give best performance with any GNSS antenna, for optimum performance we recommend our Budget Survey Tripleband or ANN-MB1 antenna.
- This board is recommended if you want to test u-blox NEO-F10N performance.
- The onboard XBee socket can be used to expand functionality with Plugin accessories (MR/LR/XLR radios, Bluetooth, Ethernet, WiFi, RS232, Canbus, L-Band, 4G/3G/2G).
- Compatible with ArduSimple plastic case
- Ardupilot compatible via JST-GH standard connector
- Timepulse output and Event input
- This product is a cheaper alternative including better accuracy to boards with NEO-M9N

## Specifications

### NEO-F10N features

- Sub meter level precision
  - <1.5m in standalone mode
  - <0.9m standalone with SBAS coverage
- Update rate
  - Default: 1Hz
  - With maximum performance: up to 8Hz
  - With reduced performance: up to 10Hz
- Multi band: L1, L5 support
- Multifrequency and Multiconstellation:
  - GPS: L1C/A L5
  - Galileo: E1-B/C E5a
  - BeiDou: B1C B2I
  - NavIC: SPS-L5
  - QZSS: L1Sb
  - SBAS: WAAS, EGNOS, MSAS, GAGAN and SouthPan
- Start-up times:
  - First position fix: 27 seconds (cold), 2 seconds (hot)
- Operating temperature Range: -40 to +85deg
- Documentation: RED, RoHS, UKCA

## Image Gallery



# Pinout

**TOP VIEW**

Description	Name	Name	Description
GPS TX1 3.3V level	TX1	<b>GND</b>	Must connect to GND
GPS RX1 2.7V - 3.6V level	RX1	<b>GND</b>	Must connect to GND
XBee RX 2.7V - 3.6V level	RX2	<b>5V_IN</b>	4.5-5.5V optional input voltage Can also be output via switch
XBee TX 3.3V level	TX2	<b>IOREF</b>	N/C when set as input Can be 3.3V output via switch
Don't connect	DNC		
Input for timestamp 3.3V level	EXTINT		
Timepulse out 3.3V level	TPS		
Ground	<b>GND</b>		

## Documentation

User Guide      <https://www.ardusimple.com/user-guide-simplegnss/>

simpleGNSS Pro includes free basic technical support. Contact [info@ardusimple.com](mailto:info@ardusimple.com) for more information.

Data and descriptions in this document are subject to change without notice. Product photos and pictures are for illustration purposes only and may differ from the real product appearance.