

RTK Portable 2

Universal and compact RTK receiver for your centimeter tracking tasks. Fits any type of project, just add your preferred GPS antenna.



More info about the product!



RTK Portable 2 SKU is: AS-PRO-PORTABLE2-0-00

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

Description

The RTK Portable 2 is the most flexible starting point for your GPS project with centimeter level accuracy.

Connect it to your Windows, Linux, Android or iOS device and start tracking with centimeter accuracy. Not all apps support centimeter GPS resolution, make sure you check our list of [Compatible software](#), or contact us if you have any doubts. We use a standard protocol called NMEA, many apps already understand this protocol. Check the full list of [Compatible software](#).

Or wire it to your preferred embedded platform: Raspberry Pi, Arduino, Pixhawk, Jetson or STM32, and enable your robot or drone with RTK technology.

The device provides out-of-the-box sub-meter level accuracy. To achieve centimeter precision, you will need to configure your NTRIP credentials. Check out our database of [free and paid NTRIP services around the world](#).

Important: you will need an antenna to use this product. Choose one from our recommended list below, or use the one that you already have at home from your previous project! Note that antenna must support RTK functionality to achieve centimeter measurements. In case of doubt:

- If you want the best of the best performance, choose the [Budget Survey Multiband GNSS Antenna](#)
- If you need to keep the weight down, select our [Compact Helical Tripleband GNSS Antenna](#)
- And if you are tight on budget, simply go with the [u-blox ANN-MB-00](#)

Includes:

- 1 RTK receiver with ZED-F9P
- 1 Double USB-C right angle cable (15cm) to connect to your phone
- 1 USB-A to USB-C cable to connect to a PC/Laptop
- 1 Self adhesive docking station

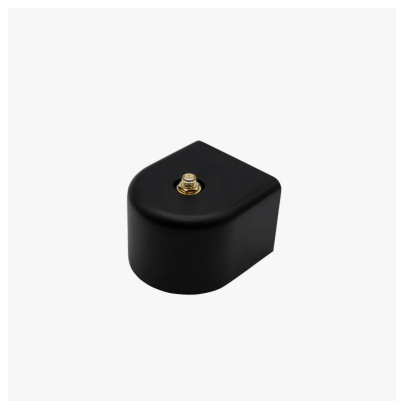
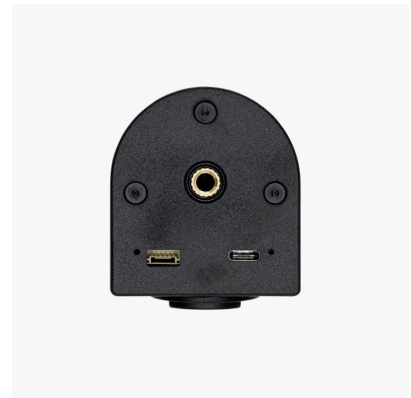
Specifications

- Interfaces: USB, UART (JST-GH connector), Bluetooth, BLE
- Power consumption: 100mA @ 5V (8 hours of work with typical phone and no-camera software running)
- Power supply: USB or JST connector
- Built-in battery: no (uses phone battery or powerbank)
- IP Rating: IP53 (can be used under light rain when mounted vertically)
- Applications: Survey, Mapping, Construction, Farming, 3D Scanning, Geofencing, Sports, Vehicle Tracking
- Weight: 70g

ZED-F9P features

- Centimeter level precision
 - <1cm with a base station up to 35km
 - <1cm with NTRIP up to 35km
 - <4cm with SSR corrections
 - <1.5m in standalone mode
 - <0.9m standalone with SBAS coverage
- Update rate
 - Default: 1Hz
 - With maximum performance: up to 10Hz
 - With reduced performance: up to 20Hz
- Multi band: L1, L2 and E5b support
- Multifrequency and Multiconstellation:
 - GPS: L1C/A L2C
 - GLONASS: L1OF L2OF
 - Galileo: E1-B/C E5b
 - BeiDou: B1I B2I
 - QZSS: L1C/A L2C
 - SBAS: WAAS, EGNOS, MSAS, GAGAN and SouthPAN
- Start-up times:
 - First position fix: 25 seconds (cold), 2 seconds (hot)
 - First RTK fix: 35 seconds (cold)
- RAW data output in UBX format
- Base and Rover functionality
- Operating temperature Range: -40 to +85degC
- Documentation: RED, RoHS

Image Gallery



Documentation

Configuration files <https://www.ardusimple.com/how-to-configure-ublox-zed-f9p/>

RTK Portable 2 includes free basic technical support. Contact 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.