

# RTK Handheld Surveyor Kit

### Includes:

- ZED-F9P RTK receiver with USB and Bluetooth/BLE inside a plastic case
- Lightweight helical antenna for multiband GNSS (IP67)
- USB-C cable
- USB OTG microUSB-B (14cm)
- USB OTG type C (22cm)
- Universal smartphone holder with 3M-Backed Rubber Pads, fits any smartphone from 5.3cm to 9.3cm with or without case
- Hand holder
- Velcro strap (20cm) to fix the receiver to the back of the smartphone holder
- Pre-configuration to send NMEA over Bluetooth/BLE and USB at the same time at 1Hz
- Plastic case has a LED to indicate Bluetooth/BLE status





More info about the product!

RTK Handheld Surveyor Kit SKU is: AS-PROKIT-HANDSURVEY-L1L2-03



# **Description**

With the RTK Handheld Surveyor Kit you will have everything you need to start your surveying tasks with RTK and centimeter level accuracy.

For Android users, use your preferred app and connect to the receiver via USB or Bluetooth.

For iOS users, currently only connection over BLE is possible, and only SW Maps app is supported.

You will only need to configure your NTRIP credentials and you are ready to go!

#### Good to know:

- You can power and connect to the GNSS receiver with only one USB OTG cable
- You can use Bluetooth and BLE with the same device (compatible with Android and iOS devices)
- Fits any smartphone from 5.3cm to 9.3cm with or without case
- Smarpthone is not included
- This product is recommended for geocatching applications

## Product Change History:

- AS-PROKIT-HANDSURVEY-L1L2-00: initial version
- AS-PROKIT-HANDSURVEY-L1L2-01: changed connector system from Mini-USB to USB-C
- AS-PROKIT-HANDSURVEY-L1L2-02: default ZED-F9P and Bluetooth baudrate set at 115'200bps
- AS-PROKIT-HANDSURVEY-L1L2-03: changed from Bluetooth to BT+BLE Bridge, preconfigured to support SPARTN/PointPerfect protocol, plastic case re-design with status LED



## **Specifications**

### **ZED-F9P features**

- Centimeter level precision
  - <1cm with a base station up to 35km</p>
  - <1cm with NTRIP up to 35km</p>
  - <4cm with SSR corrections</p>
  - <1.5m in standalone mode</p>
  - <0.9m standalone with SBAS coverage</li>
- Update rate
  - o Default: 1Hz
  - With maximum performance: up to 10Hz
  - With reduced performance: up to 20Hz
- Multi band: L1, L2 and E5b support
- Multifrequency and Multiconstellation:
  - o GPS: L1C/A L2C
  - o GLONASS: L1OF L2OF
  - o Galileo: E1-B/C E5b
  - o BeiDou: B1I B2I
  - o 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)
- Interfaces (check product documentation to verify which are available):
  - o USB
  - UART
  - o XBee
  - o Timepulse
  - o Event
  - Safeboot
- RAW data output in UBX format
- Base and Rover functionality
- Operating temperature Range: -40 to +85deg
- Documentation: RED, RoHS



# **Image Gallery**















## **Documentation**

RTK Handheld Surveyor Kit https://www.ardusimple.com/user-manual-handheld-

User Guide surveyor-kit/

EU Conformity & RoHS https://www.ardusimple.com/eu-conformity-certificates/

Certificates

3D CAD STEP Files https://www.ardusimple.com/3d-cad-step-files/

RTK Handheld Surveyor Kit 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.