simpleRTK2B Budget
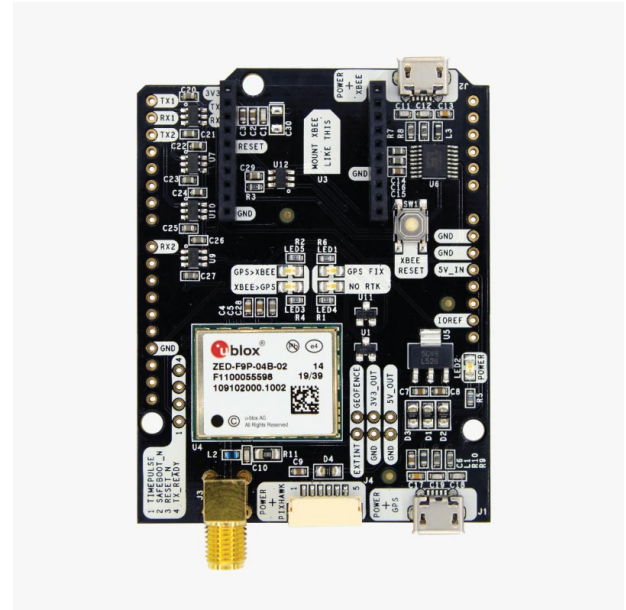
Includes:
- 1 simpleRTK2B Budget board (ZED-F9P)

More info about the product!

simpleRTK2B Budget has several different configurations to provide you with flexibility:

SKU	Variation Name
AS-RTK2B-F9P-L1L2-HS-02	Headers soldered (+26€)
AS-RTK2B-F9P-L1L2-NH-02	Without headers

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.

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Description

simpleRTK2B Budget is a standalone board that allows to evaluate dual band RTK GNSS technology including centimeter level accurate position.
It's powered by **u-blox ZED-F9P** module and can be used standalone, or connected with Arduino, Ardupilot / Pixhawk (JST connector), Raspberry Pi, Nvidia Jetson and STM32 Nucleo platforms, as a shield. It can provide up to 10 RTK positions every second.

This board is ideal to make the first steps in RTK.
More details are available in the Specifications and Documentation tabs.
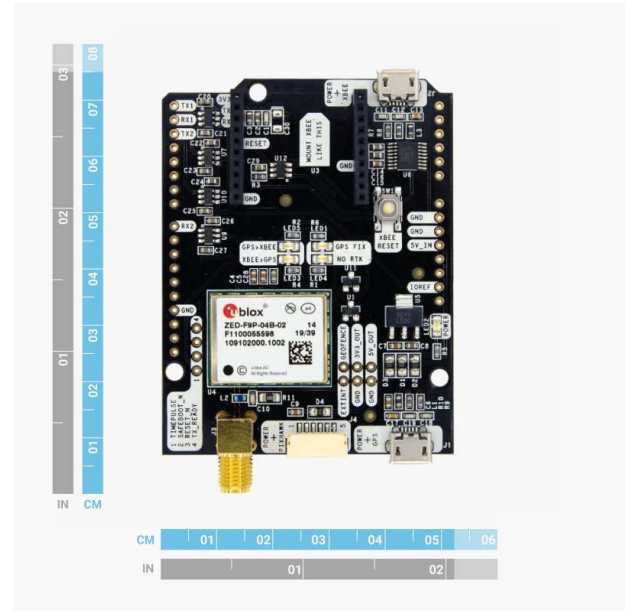
Good to know:
– This product is compatible but doesn't include multiband GNSS antenna, which is necessary to use the product.
– The module will not give good performance with a standard GNSS antenna, requires a multiband one.
– This product can be used as Base or Rover
– This board is recommended if you want to test u-blox ZED-F9P performance.
– The onboard XBee socket can be used to expand functionality with Plugin accessories (MR/LR radios, Bluetooth, WiFi, Ethernet, Dataloggers, RS232, Canbus, L-Band). Not compatible with high power XBee accessories (XLR radio and 4G NTRIP Master). To have this full compatibility consider simpleRTK2B Pro.
– You can use the Shield for Second Plugin socket to connect 2 plugins at the same time.
– Compatible with Ardusimple plastic case

Specifications

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 +85deg
- Documentation: RED, RoHS

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Image Gallery

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Pinout

TOP VIEW

Description	Name
ZED-F9P TX1 IOREF level	TX1
ZED-F9P RX1 IOREF level	RX1
XBee TX/ZED-F9P RX2 IOREF level	TX2
XBee RX/ZED-F9P TX2 IOREF level	RX2
Ground	GND

Name	Description
GND	Must connect to GND
GND	Must connect to GND
5V_IN	4.5-5.5V optional input voltage
IOREF	1.8-5V, defines voltage of TX/RX

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Documentation

User Guide	https://staging.ardusimple.com/user-guide-simplertk2b-budget/
Configuration files	https://staging.ardusimple.com/how-to-configure-ublox-zed-f9p/
Download CAD models	https://staging.ardusimple.com/wp-content/uploads/3D_CAD/simpleRTK2B_Budget.STEP
	https://staging.ardusimple.com/wp-content/uploads/3D_CAD/simpleRTK2B_Budget_with_headers.STEP

simpleRTK2B Budget includes free basic technical support. Contact info@ardusimple.com for more information.

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