

simpleRTK2B - 4G NTRIP Starter Kit

Includes:

- 1 simpleRTK2B Pro board (ZED-F9P)
- **Free PointPerfect RTK-SSR corrections until 2024**
- 1 u-blox GNSS Multiband antenna ANN-MB-00 (IP67)
- 1 4G NTRIP Master (4G radio module with NTRIP client) including 2 units 4G antennas with integrated cable

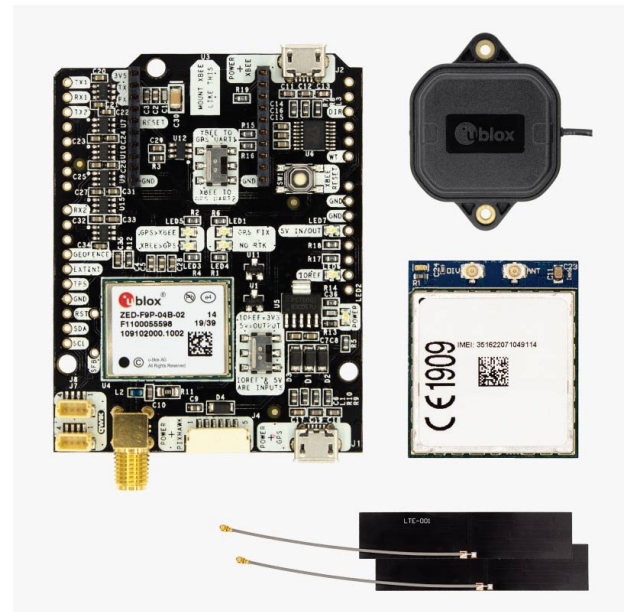


More info about the product!

simpleRTK2B - 4G NTRIP Starter Kit has several different configurations to provide you with flexibility:

SKU	Variation Name
AS-STARTKIT-4G-L1L2-EUNH-00	Europe
AS-STARTKIT-4G-L1L2-NANH-00	North America

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

If you are looking for a board with ZED-F9P that autonomously connects to a server to download correction data, or automatically pushes its centimeter accurate location to a server, this is your product.

Using the same technology that your mobile phone is using, simply introduce a cellular SIM card into the device, configure it using a configuration tool (no programming involved!), and let the kit do the job for you.

The ArduSimple simpleRTK2B - 4G NTRIP Starter Kit, in any area with cellphone coverage, is able to do autonomously:

- NTRIP Client (to get corrections from your preferred correction service)
- NTRIP Server (to send your base corrections to a NTRIP caster like RTK2go.com)
- TCP socket client (to send position or any other message to your server)
- PointPerfect Client (This product has free RTK-SSR corrections until 31/12/2024. Later if you want you can get a subscription starting at only \$3.90 for 60 hours)

Good to know:

- You will need a SIM card with internet access capabilities to use this product (MicroSIM form factor)
- Compatible with u-blox Thingstream PointPerfect augmentation service
- This product has free corrections until 31/12/2024

Specifications

4G NTRIP Master features

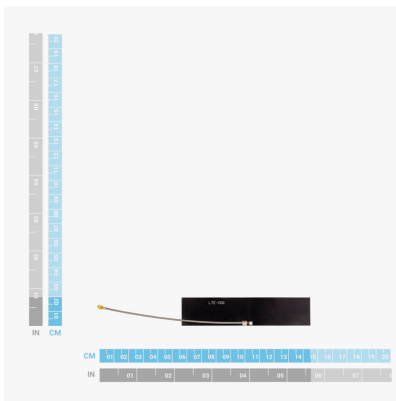
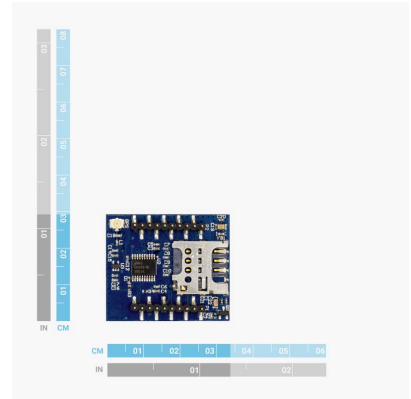
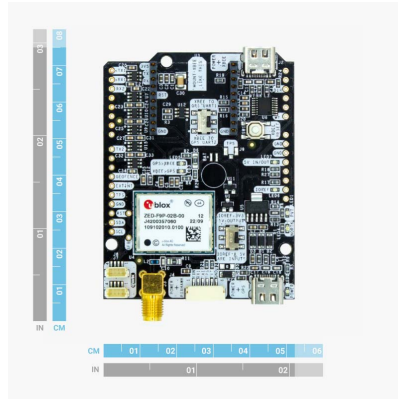
- LTE FDD Cat.4 with dual antenna for Rx Diversity and MIMO
- Compatible with 2G, 3G and 4G networks
- Integrated SIM holder: MicroSIM
- Antenna type: external passive
- Antenna connector (modem side): uFL / IPEX
- Frequency (Europe variant):
 - For Europe, but also Middle East & Asia, compatible with:
 - 4G Bands (MHz): B1(2100), B3(1800), B7(2600), B8(900), B20(800)
 - 3G Bands (MHz): B2(2100), B8(900)
 - 2G Bands (MHz): B3(1800), B8(900)
- Frequency (North America variant):
 - For USA* & Canada, compatible with 4G and 3G networks.
 - 4G Bands (MHz): B2(1900), B4(1700), B5(850), B12/B13 (700)
 - 3G Bands (MHz): B2(1900), B5(850)
 - * Only compatible with AT&T, T-Mobile and virtual operators working on these networks. Not compatible by default with Verizon SIM cards, contact us in this case.
- Operating temperature Range: -40 to +85deg
- Documentation: RED, RoHS, FCC, IC, PTCRB

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

Image Gallery



Pinout

TOP VIEW

Description	Name	Name	Description
GPS TX1 IOREF level	TX1	DNC	Don't connect
GPS RX1 IOREF level	RX1	DNC	Don't connect
XBee TX/GPS RX2 IOREF level	RX2		
			
XBee RX/GPS TX2 IOREF level	TX2	GND	Must connect to GND
Configurable fence output 3.3V level	FENCE	GND	Must connect to GND
Event input for timestamp 3.3V level	EXTINT	5V_IN	4.5-5.5V optional input voltage Can also be output via switch
Timepulse out 3.3V level	TPS	IOREF	1.8-5V, defines voltage of TX/RX Can also be 3.3V output via switch
Ground	GND		
I2C Data line pulled-up 3.3V	SDA		
I2C Clock line pulled-up 3.3V	SCL		

Documentation

User Guide	https://www.ardusimple.com/4g-ntrip-client-hookup-guide/#overview
Antenna Installation Guide	https://www.ardusimple.com/gps-gnss-antenna-installation-guide/
Configuration files	https://www.ardusimple.com/how-to-configure-ublox-zed-f9p/

simpleRTK2B - 4G NTRIP Starter 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.