simpleRTK2B M.2

Includes:
- 1 simpleRTK2B M.2 board

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More info about the product!

simpleRTK2B M.2 has several different configurations to provide you with flexibility:

SKU	Variation Name
AS-RTK2B-M2-L1L2-F9P-00	ZED-F9P
AS-RTK2B-M2-L1L2-F9R-00	ZED-F9R

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

Bring low cost high precision RTK GNSS positioning to your M.2 socket platforms thanks to ZED-F9 and this board fully compatible with M.2 2230 Key A and Key E sockets (Part of NGFF, Next Generation Form Factor). For example, you can easily add RTK to your Asus Tinkerboard or the NVIDIA Jetson Xavier NX.

Good to know:
- You will need a uFL to SMA pigtail to connect it to our Multiband GPS/GNSS antennas.
- Both GPS antenna input and Timepulse output have a uFL connector.
- Bulk pricing starting 50 units

Specifications

ZED-F9P features

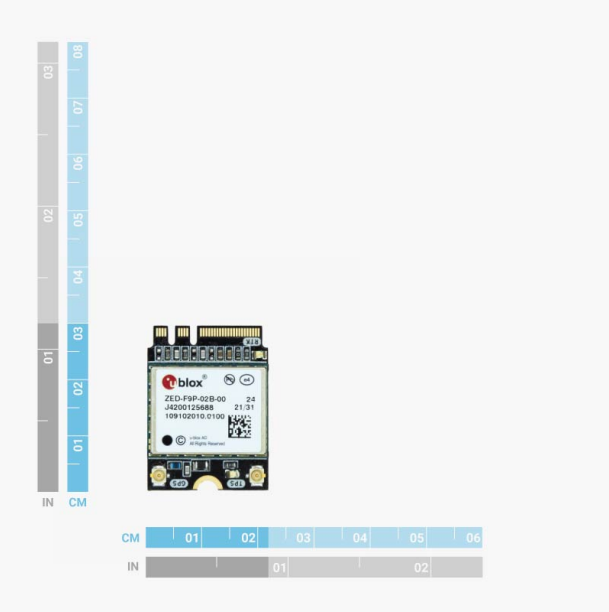
- Centimeter level precision
  - <1cm with a base station up to 35km
  - <1cm with NTRIP up to 35km
  - <4cm with SSR corrections
  - <1.5m in standalone mode
  - <0.9m standalone with SBAS coverage
- Update rate
  - Default: 1Hz
  - With maximum performance: up to 10Hz
  - With reduced performance: 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

ZED-F9R 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
  - Maximum GNSS update rate: 4Hz
  - Maximum fusion update rate: 30Hz
- 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)
- Dynamic models: ground vehicle, slow-moving service robots and electric scooters (drones, boats and pedestrians not supported)
- RAW data output in UBX format
- No Base Station function, only RTK Rover
- Operating temperature Range: -40 to +85deg
- Documentation: RED, RoHS

Image Gallery



Pinout

Description	Function	Pin		Function	Description
			1	GND	
	VIN_3V3	2	3	USB_DP	
	VIN_3V3	4	5	USB_DN	
		6	7	GND	
		8	9		
		10	11		
		12	13		
		14	15		
		16	17		
	GND	18	19		
		20	21		
		22	23		
		24	25		
		26	27		
		28	29		
		30	31		
		32	33	GND	
		34	35		
		36	37		
		38	39	GND	
		40	41		
		42	43		
		44	45	GND	
		46	47		
		48	49		
		50	51	GND	
Feature disabled	RESET	52	53		
		54	55		
Feature disabled	W_DISABLE	56	57	GND	
		58	59		
		60	61		
		62	63	GND	
		64	65		
		66	67		
		68	69	GND	
		70	71		
	VIN_3V3	72	73		
	VIN_3V3	74	75	GND	

Documentation

User Guide	https://staging.ardusimple.com/user-guide-simplertk2b-m-2/
Configuration files	https://staging.ardusimple.com/how-to-configure-ublox-zed-f9p/
Download CAD model	https://staging.ardusimple.com/wp-content/uploads/3D_CAD/AS-RTK2B-M2-L1L2-F9P-00-R00.STEP
Footprint	https://www.snapeda.com/search/?q=ardusimple

simpleRTK2B M.2 includes free basic technical support. Contact info@ardusimple.com for more information.
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