RTK Base Station

Includes:
- 1 RTK Base Station (Mosaic-X5)

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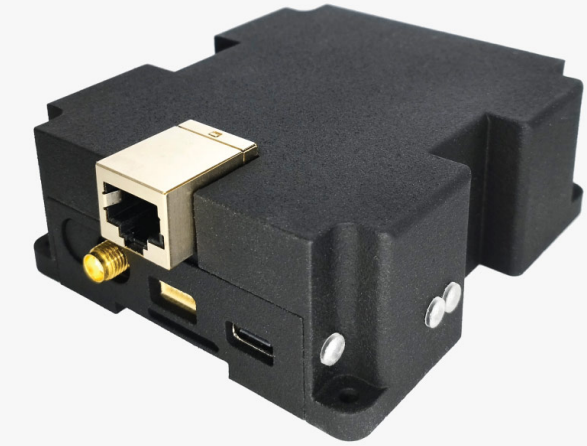
More info about the product!



RTK Base Station SKU is: AS-PRO-CORS-L125ETH-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

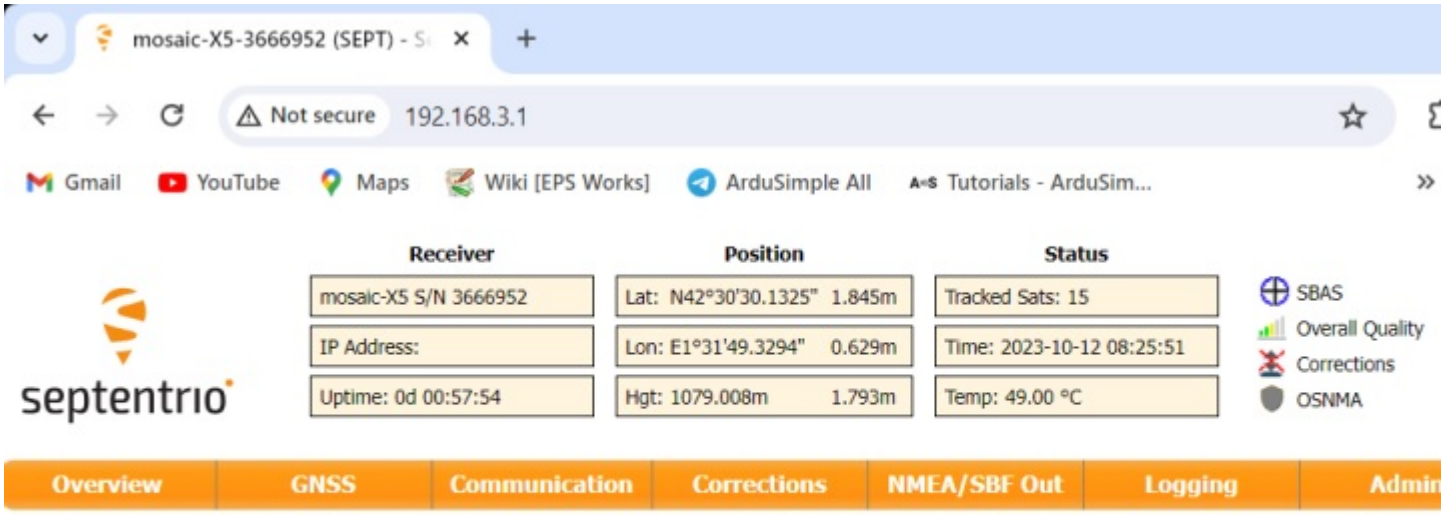
The ArduSimple RTK Base Station is a housed and ready to use full band full constellation GNSS receiver for 24/7 use. It's based on **Septentrio mosaic-X5** module and is designed to operate as a reference station for local RTK or CORS network densification.

Top performance in all environments thanks to Septentrio patented technologies:
- AIM+ anti-jamming and anti-spoofing
- IONO+ protection against ionospheric disturbances and scintillations
- APME+ multipath mitigation

No subscription required, thanks to its integrated NTRIP:
- Up to 4 simultaneous outgoing NTRIP server connections.
- Embedded NTRIP caster for up to 10 NTRIP clients with individual username/password control.
- Up to 5 simultaneous TCP outputs
- Onboard RINEX and GNSS datalogging, with optional and schedulable push to FTP feature

Compatible with basically any receiver:
- NMEA 0183, v2.3, v3.03, V4.0
- RINEX v2.x, v3.x
- RTCM v2.x, v3.x (MSM included)
- CMR v2.0
- Septentrio Binary Format (SBF)

Easy to configure and monitor thanks to its intuitive web app:
- Available both via USB and Ethernet, it allows you to monitor GNSS indicators and configure your base station and users



Good to know:
- This product is compatible but doesn't include multiband GNSS antenna, which is necessary to use the product.
- Compatible with existing CORS networks (Continuously Operating Reference Station)
- 868/916MHz radio module can be added as an option, contact us for custom radio integrations

AS-PRO-CORS-L125ETH-00 ASB-PRO-CORS-L125ETH-00

Specifications

Interfaces

- USB
- Ethernet
- Radio (optional)

Electrical:

- Input voltage: 5V (USB or JST connector)
- Power consumption: 400mA + antenna
- Antenna supply: 3.3V up to 150mA

Mosaic-X5 features

- Millimeter level precision
  - <1cm with a base station up to 35km
  - <1cm with NTRIP up to 35km
  - <1.2m in standalone mode
  - <0.6m standalone with SBAS coverage
- Update rate
  - Default: 1Hz
  - With maximum performance: up to 100Hz
- Multi band: L1, L2 and L5 support, 448 hardware channels
- Multifrequency and Multiconstellation:
  - GPS: L1C/A L1PY L2C L2P L5
  - GLONASS: L1CA L2CA L2P L3 CDMA
  - Galileo: E1 E5a E5b E5 AltBloc E6
  - BeiDou: B1I B1C B2a B2I B3
  - QZSS: L1C/A L2C L5
  - Navic: L5
  - SBAS: WAAS, EGNOS, MSAS, GAGAN, SDCM (L1 L5)
- Start-up times:
  - Cold start: <45s
  - Warm start: <20s
  - Re-acquisition: 1s
- Protocols:
  - Septentrio Binary Format (SBF)
  - NMEA 0183, v2.3, v3.03, v4.0
  - RINEX v2.x, v3.x
  - RTCM v2.x, v3.x (MSM included)
  - CMR v2.0 (out/in), CMR+ (input only)
- Interfaces **(check user guide to verify which are available)**:
  - USB

    - UART
    - XBee
    - Timepulse
    - Event
- Base and Rover functionality
- Operating temperature Range: -40 to +85deg
- Certification: CE, WEEE, ISO 9001-2015
- Documentation: RED, RoHS

Documentation

how to configure Septentrio Mosaic boards	https://staging.ardusimple.com/how-to-configure-septentrio-mosaic-x5-and-mosaic-h/

RTK Base Station 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.