

EMLID



REACH RS3

RTK GNSS receiver with tilt compensation

Multi-band base and rover

IMU tilt compensation

LTE modem

Dual-band radio

Buy online! Go to dronesurvey.asia/store



Key features

High-precision IMU

Tilt: RTK+ 2 mm+0.3 mm/°

Survey with under 20 mm precision at up to 60 degree tilt. Reach RS3 is calibration-free and works out of the box. The receiver is immune to magnetic disturbances, so metal objects and electronics don't affect the accuracy.

Get a Fix in 5 seconds

The receiver gets a cm-accurate solution in ~5 seconds and maintains robust performance even when the sky is partially obstructed or the unit is tilted. Signals tracked: GPS/QZSS, GLONASS, BeiDou, and Galileo.

18 hours of work with tilt compensation

The industrial-grade battery can endure up to 22 hours of logging or 18 hours of work as an RTK rover with tilt compensation. For uninterrupted multi-day operations, simply connect a power bank via USB-C.

RINEX logging and PPP support

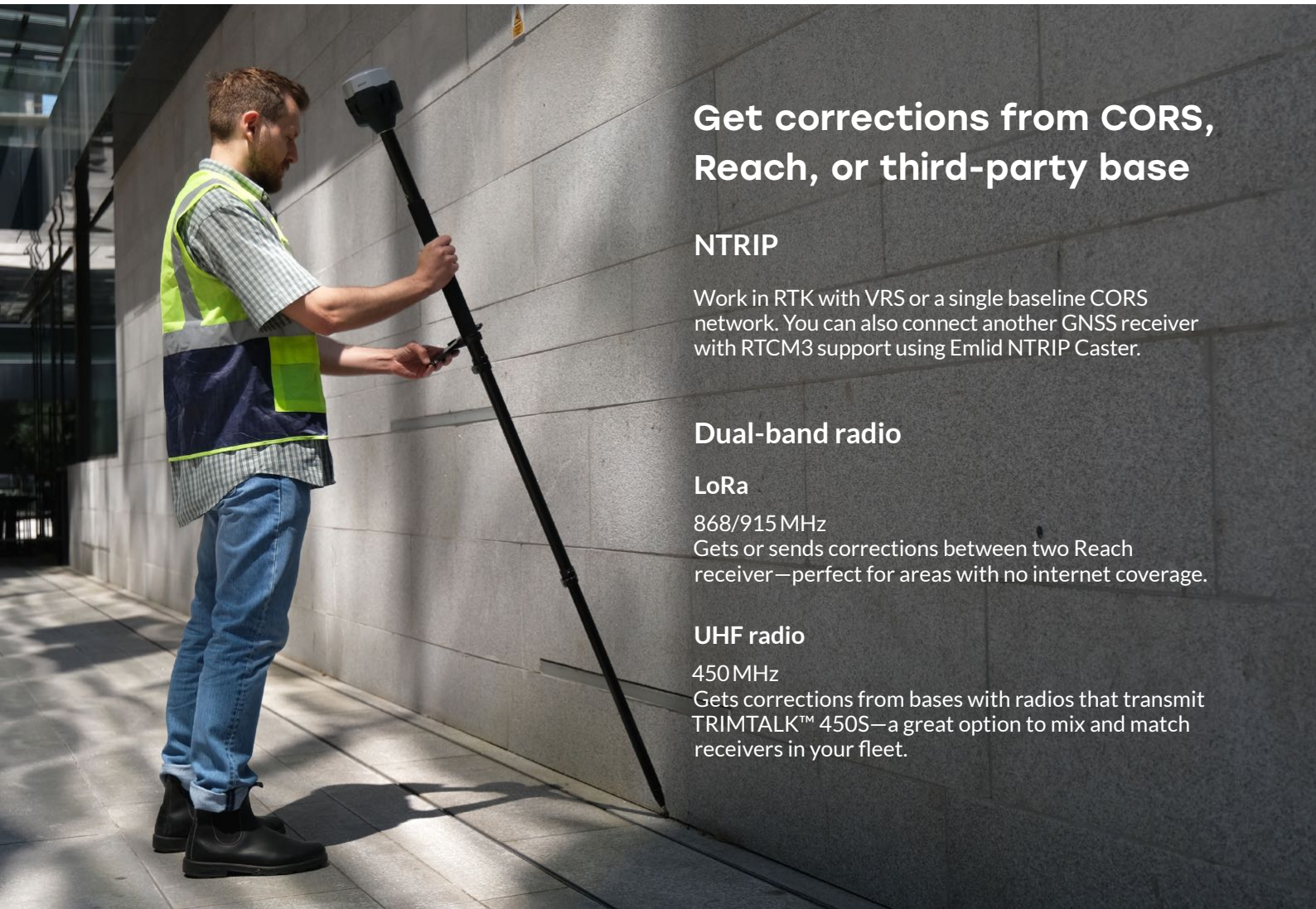
Reach RS3 records raw data in the RINEX format for post-processing. Use our free PPK software, Emlid Studio, or any other software with RINEX support. Logs are also compatible with OPUS, AUSPOS, and PPP services.

Built-in LTE modem

Insert a SIM card into Reach RS3 and let it broadcast or receive corrections via NTRIP.

Rugged and compact

The polycarbonate body coated with elastomer makes Reach RS3 impact-resistant and ready for harsh conditions. The receiver is dustproof and waterproof to IP67 with an operating temperature of -20° to 65° C (-4° to 149° F).



Get corrections from CORS, Reach, or third-party base

NTRIP

Work in RTK with VRS or a single baseline CORS network. You can also connect another GNSS receiver with RTCM3 support using Emlid NTRIP Caster.

Dual-band radio

LoRa

868/915 MHz

Gets or sends corrections between two Reach receiver—perfect for areas with no internet coverage.

UHF radio

450 MHz

Gets corrections from bases with radios that transmit TRIMTALK™ 450S—a great option to mix and match receivers in your fleet.

Comes with software for the field and the office

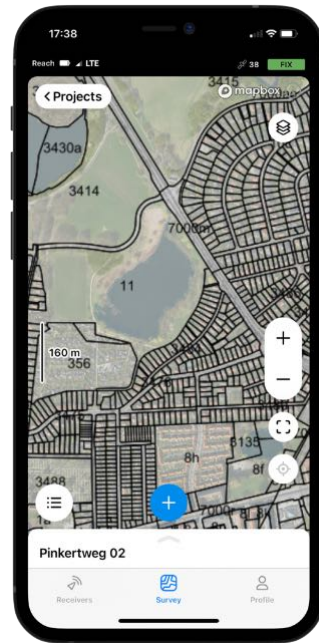


Emlid Flow

The Emlid Flow mobile app manages all field-related tasks, including receiver configuration, RINEX logging, data collection, and stakeout.



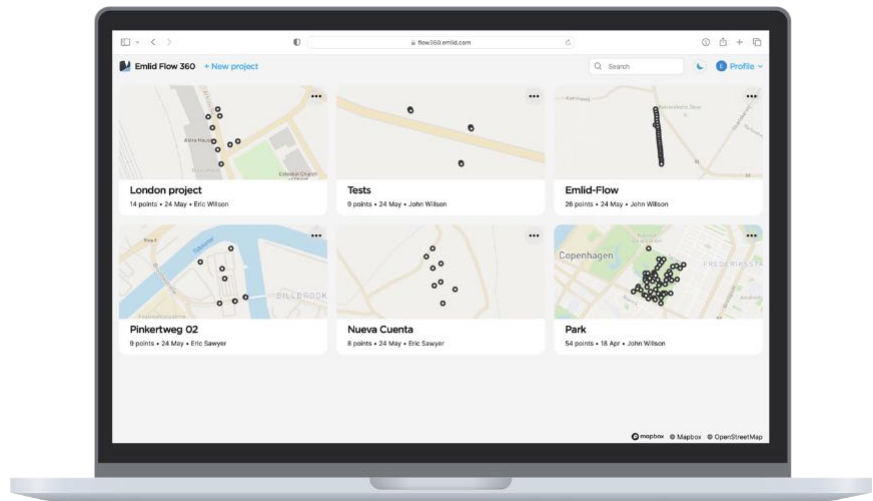
- Tilt compensation
- Points and lines
- Coding
- Localization
- Background WMS/WMTS maps
- Sync with up to 3 devices



Emlid Flow 360

The cloud-based Emlid Flow 360 allows you to access your survey data in a browser and easily prepare, manage, and export your projects.

- Creating custom code libraries
- Adding WMS/WMTS layers
- Satellite map
- Export and import of survey data
- Project management and data sync



The basic features are free. Professional survey tools are available with the Survey plan. Upgrade your Emlid Flow and Flow 360 with a single subscription. Learn more about features and plans.

Expand your fleet with Reach RS3



Reach RS3

- 1 x Reach RS3
- 1 x LoRa/UHF antenna
- 1 x USB cable
- 1 x Carrying case with strap

Free 3-month subscription to the Emlid Flow Survey Plan



Reach RS3 Survey Kit

- 2 x Reach RS3
- 2 x LoRa/UHF antenna
- 2 x USB cable
- 2 x Carrying case with strap

Free 3-month subscription to the Emlid Flow Survey Plan

Reach RS3 specifications

POSITIONING

| | | |
|---------------------------|---|---------------------------------------|
| Precision | Static | H: 4 mm + 0.5 ppm V: 8 mm + 1 ppm |
| | PPK | H: 5 mm + 0.5 ppm V: 10 mm + 1 ppm |
| | RTK | H: 7 mm + 1 ppm V: 14 mm + 1 ppm |
| Convergence time | ~5 s typically | |
| Tilt compensation | RTK + 2 mm + 0.3 mm/° | |
| Signals | GPS/QZSS L1C/A, L2C, GLONASS L1OF, L2OF, BeiDou B1I, B2I, Galileo E1-B/C, E5b | |
| Number of channels | 184 | |
| Update rate | Up to 10Hz | |
| IMU | 6DOF | |

MECHANICAL

| | |
|-------------------------------|--------------------|
| Dimensions | 126 x 126 x 142 mm |
| Weight | 950 g |
| Operating temperatures | -20 to +65 °C |
| Ingress protection | IP67 |

ELECTRICAL

| | |
|-----------------|--|
| Autonomy | 18 hrs as an RTK rover with tilt compensation, 22 hrs of logging |
| Battery | Li-Ion 5200 mAh, 7.2V, 37.44 Wh |
| Charging | USB-C 5V, 3A |

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CONNECTIVITY

| | | |
|-------------------------|---------------------------|--|
| LoRa radio | | Transmit and receive |
| | Frequency range | 868/915 MHz |
| | Power | 0.1W |
| | Distance | Up to 8 km |
| UHF radio | | Receive-only |
| | Frequency range | 410-470 MHz |
| | Protocol | TRIMTALK 450S* |
| | Modulation type | GMSK |
| LTE modem | Regions | Global |
| | Bands | FDD-LTE: 1, 2, 3, 4, 5, 7, 8, 12, 13, 18, 19, 20, 26, 28, 66 TD-LTE: 38, 40, 41 UMTS (WCDMA/FDD): 1, 3, 2, 4, 5, 6, 8, 19 Quad-band, 850/1900, 900/1800MHz |
| | SIM card | Nano-SIM |
| | | |
| Wi-Fi | 802.11b/g/n | |
| Bluetooth | 4.0/2.1 EDR | |
| Ports | RS-232, USB-C | |
| Protocols | Corrections | NTRIP, RTCM3 |
| | Position output | NMEA, LLH/XYZ |
| Data logging | RINEX, NMEA, LLH/XYZ, UBX | |
| Internal storage | 16 GB | |

*TRIMTALK is a trademark of Trimble Inc.



Buy Emlid direct online at dronesurvey.asia/store. Free shipping in Hong Kong!