



REACH RS2+

Datasheet



Key features

- Tracks GPS/QZSS L1C/A, L2C; GLONASS L1OF, L2OF; BeiDou B1I, B2I; Galileo E1-B/C, E5b
- Fast RTK convergence
- Multi-feed antenna with multipath rejection
- 868/915MHz LoRa modem for up to 8km connectivity
- Global LTE modem
- 22hours on 1 charge
- NTRIP and VRS support, works with RTCM3
- Logs RINEX at update rate up to 10Hz
- 16GB of internal storage
- IP67, water and dustproof



REACH RS2+

Technical specifications

POSITIONING

| | | |
|--------------------|--|-------------------------------|
| Precision | Static | H: 4 mm+0.5 ppm V: 8mm+1 ppm |
| | PPK | H: 5 mm+0.5 ppm V: 10mm+1 ppm |
| | RTK | H: 7 mm+1 ppm V: 14 mm+1 ppm |
| Convergence time | ~5 s typically | |
| Signal tracked | GPS/QZSS L1C/A, L2C, GLONASS L1OF, L2OF, BeiDou B1I, B2I, Galileo E1-B/C, E5b | |
| Number of channels | 184 | |
| Update rates | Up to 10Hz | |

CONNECTIVITY

| | | |
|------------------|---------------------------------|--|
| UHF LoRa radio | Frequency range | 868/915 MHz |
| | Power | 0.1W |
| | Distance | Up to 8km |
| 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, 2, 3, 4, 5, 6, 8, 19 Quad-Band, 850/1900, 900/1800MHz |
| | SIM card | Nano-SIM |
| | Wi-Fi | 802.11 b/g/n |
| Bluetooth | 4.0/2.1 EDR | |
| Ports | RS-232, USB Type-C | |
| Data protocols | Corrections | NTRIP, RTCM3 |
| | Position output | NMEA, LLH/XYZ |
| Data logging | RINEX at update rate up to 10Hz | |
| Internal storage | 16GB | |

MECHANICAL

| | |
|-----------------------|--------------------------|
| Ingress protection | IP67 water and dustproof |
| Dimensions | 126x126x142mm |
| Weight | 950g |
| Operating temperature | -20°C to +65°C |

ELECTRICAL

| | |
|----------------------|-------------------------|
| Autonomy | 16 hrs as LTE RTK rover |
| Charging | USB-C 5V 2A |
| External power input | 6-40V |
| Battery | LiFePO4 6400mAh, 6.4V |

COMMUNICATIONS AND DATA STORAGE

- 9PIN port: RS-232, PPS, Event
- USB OTG
- Internal LTE modem:
 - LoRa technology
 - Reliable link on up to 8 km baseline
 - Transmit power up to 100mW
 - Configurable 862-1020MHz carrier
- Internal LTE modem
 - Global
 - Quad-band, 850/1900, 900/1800MHz
- Built-in short-range Wi-Fi 802.11 b/g/n, WEP, WPA, WPA2 encryption
- Built-in short-range Bluetooth 4.0/2.1 EDR
- Data storage 16GB internal memory
- Raw logs in RINEX, UBX
- External Radio Modem connectivity over RS-232/USB OTG
- RTCM 3.x input and output over Wi-Fi, Bluetooth, LoRa, USB, RS-232, NTRIP
- NMEA 0183, ERB output over Wi-Fi, Bluetooth, USB, RS-232
- Emlid Flow app for iOS and Android for configuration and surveying



YOUR LOCAL DEALER



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