

GNSS Receiver (GPS)

- 1 GNSS receiver (net rover) that can be connected to CORS with any required accessories
- Data collector (controller)
- Adjustable rover pole (2m)
- Hard carrying case for the receivers

800/900/1800/2100/2600 MHz

- 3G bands: 900/2100 MHz
- 2G bands: 900/1800 MHz
- Support GSM, Point to Point/Points and NTRIP
- Bluetooth: V 4.0 protocol, compatible with Windows OS and Android OS
- Calibration-free IMU: Up to 60° tilt with 2cm accuracy

Signal Tracking

- Channels: 500
- GPS: L1 C/A L2C, L2P, L5
- BeiDou: B1, B2, B3
- BeiDou Global Signal: B1C, B2a
- GLONASS: L1 C/A, L1P, L2 C/A, L2P
- Galileo: E1, E5a, E5b
- QZSS: L1C, L2, L5, L1C/A
- SBAS: WAAS, EGNOS, MSAS, GAGAN, L-Band

Data Format

- Correction data I/O:
 - RTCM 2.X, 3.X formats, CMR (GPS only), CMR+ (GPS only).
- Position data output rates:
 - 1 Hz, 2 HZ, 5 HZ, 10 HZ, 20 HZ

Performance Specifications

- Cold start: <50 s
- Warm start: <30 s
- Hot start: < 15 s
- RTK Initialization time: <10 s
- Signal re-acquisition: <1.5 s
- Initialization reliability: >99.9%

Physical

- Size (L x W x H): 16.0 cm x 8.0 cm
- Weight: 1.5 kg with two batteries
- External power supply: 6V~28V
- Power Consumption: 1.7 W

Positioning Specifications

- Static and Fast Static:
 - Horizontal: 2.5 mm + 0.5 ppm
 - Vertical: 5 mm + 0.5 ppm
- Long Observation Static:
 - Horizontal: 3 mm + 0.1 ppm
 - Vertical: 15 mm + 1 ppm
- Real Time Kinematic:
 - Horizontal: 8 mm + 1 ppm
 - Vertical: 15 mm + 1 ppm
- PPP
 - Horizontal: 10cm
 - Vertical: 20cm
- SBAS: 1 m 3D RMS
- Standalone: 1.5 m 3D RMS

Environmental

- Working temperature: -40 °C to + 65 °C
- Storage temperature: -40 °C to + 85 °C
- Humidity: 100% non-condensation
- Waterproof and dust proof: IP67
- Shock: Designed to survive a 2m drop onto concrete

Communications

- 1 Serial port (7 pin Lemo): Baud rates up to 921,600 bps.
- Enhanced UHF modem:
 - Full frequency range: 410-470 MHz
 - Transmit power: 0.5-2W adjustable
 - Range: 15 km
- Wifi/4G modem
 - 4G bands:

Electrical and memory

- Li-ion battery capacity 2 x 3400 mAh
- Input Voltage: 6~28 VDC
- Power Consumption: 1.7 W
- 25 hours typically without physically changing battery
- Memory: 8 GB

Software

- Data collection software

IMPORTANT NOTE:

- Original technical specification sheet provided by the supplier must represent that the instrument meets the minimum specification requirement.