**PERFORMANCE SPECIFICATIONS**

### Satellite Signals Tracked Simultaneously

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<td>Vertical: 5mm + 0.5ppm RMS, Horizontal: 2.5mm + 0.5ppm RMS</td>
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</table>

### Bluetooth 4.2/2.1+EDR, 2.4GHz

**Internal UHF Radio**
- External HDL460A Full Protocols Radio
- Frequency: 403-470MHz
- Channels: 116 (16 scalable)
- Transmitting power: 10W/35W adjustable
- Supports multiple protocols: Hi-TARGET, TRIMTALK450S, TRIMMARK III, TRANSEOT, etc.

### GLONASS L1, L2
- Vertical: 3cm accuracy in the inclination of 45 degree
- Horizontal: 2cm accuracy in the inclination of 30 degree

**Tilt Survey Performance**
- Vertical: ±0.5m + 1ppm RMS
- Horizontal: ±0.5m + 1ppm RMS

### DGPS
- Horizontal: ±0.25m + 1ppm RMS
- Vertical: ±0.5m + 1ppm RMS

### DGPS Error Sources
- SBAS: 0.5m
- Initialization time: Typically <10s
- Initialization reliability: Typically > 99.99%

### Power Consumption
- 4.2W
- 7-28V DC external power input (5-pin port) with over-discharge protection

### Data Storage
- 8GB ROM internal storage

### Internal Battery
- Internal 7.4V/6800mAh lithium-ion rechargeable battery.
- Charging: supports USB PD3.0 quick charge, Quick charge within 3.5 hours.
- Supports Power Bank charging.
- Transmitting power: 10W/35W adjustable
- Dimensions: 156mm × 77mm × 15mm
- Weight: ≤1.2kg (includes battery)

### Environment
- Operation Temperature: -30℃~+70℃
- Humidity: 100%, condensing
- Water/Dustproof: IP68
- Shock and Vibration: Designed to survive a 2m natural fall onto concrete

### I/O Interface
- 1 × USB port, Type C, OTG function
- 1 × SMA antenna connector
- 1 × DC power input (5-pin)
- 1 × Nano SIM card slot

### Data Formats
- Output Rate: 1Hz-20Hz
- Static data format: GNS, Rinex
- Network model: VRS, FIX, MAC, supports NTRIP protocol
- CMR: RTCM 1.0, RTCM 2.3, RTCM 3.1, RTCM 3.2
- Navigation Outputs ASCII: NMEA-0183

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### GPS L1, L2
- Vertical: 5mm + 0.5ppm RMS
- Horizontal: 2.5mm + 0.5ppm RMS

### GPS L5
- Vertical: 15mm + 1ppm RMS
- Horizontal: 8mm + 1ppm RMS

### Communication
- Bluetooth 4.2/2.1+EDR, 2.4GHz
- Network Communication: 4G cellular mobile network (TDD-LTE, FDD-LTE, WCDMA, EDGE, GPRS, GSM)
- WiFi frequency is 2.4G, support 802.11b/g/n protocol.

### Control Panel
- Physical Button: 2
- LED Lamp: Satellite, Signal

### Additional Specifications
- 1 × Nano SIM card slot
- 1 × DC power input (5-pin)
- 1 × SMA antenna connector
- 1 × USB port, Type C, OTG function
- 1 × DC power input (5-pin)
- 1 × Nano SIM card slot

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1. Description and Specifications are subject to change without notice.
2. Compliant, but subject to availability of BDS ICD and Galileo commercial service definition. BDS B3 and Galileo E6 will be provided through future product upgrade.
Hi-Survey Road is an Android software that is designed for all types of land survey and road engineering projects in the field. It is compatible with Hi-Target professional controllers, Android phones, tablets and other third-party Android devices. It is a sleek and easy-to-use software that supports the operating of big data with built-in tools. With customized industrial application solutions, more possibilities are created for users.

HBC, the all-in-one post-processing desktop software, supports processing multi-sourced data from all kinds of surveying equipment, including RTK, total station, UAV, GIS, 3D laser and levels. This one-stop service simplifies the workflow and improves the efficiency of field data processing.

HBC enables users to finish the joint operations of multiple pieces of equipment in projects more easily, enabling users to fix various problems, like switching between lots of different processing software and data results that are not interconnected, as well as complex, cumbersome workflows.