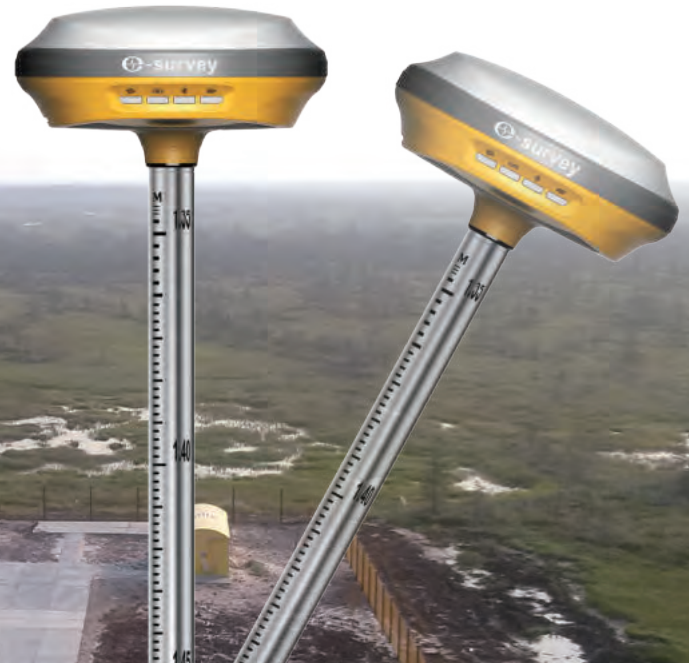


# E100

## Network RTK Receiver

E100 is a network receiver by eSurvey GNSS. The durable IP67 design makes it possible to work in various of environments. Multi constellation and frequency tracking always gives a Fixed solution for your job. Thanks for the small-size design, E100 is suitable for different applications such as car and machine control.



### Multi-constellation and multi-frequency

With 800 channels of GNSS tracking, E100 provides stable and reliable accuracy. All GNSS signals are coming with standard including GPS, BDS, GLONASS, GALILEO, QZSS and SBAS.

### MEMS Dynamic Tilt Survey

eSurvey's innovation tilt survey solution provides a surprising experience. The sensor is adapted to various of working environments and can be ready within 10 sec. Maximum 60 ° incline angle ensures a tilt-to-go survey without stopping your work.

### L-band Atlas

Atlas is a service to provide global precision correction service over L-band satellites. With ATLAS subscription, E100 is able to achieve centimeter accuracy without any base station.

### aRTK

Powered by Atlas, the innovative aRTK technology operates on any Atlas-capable device by enabling it to maintain RTK-level accuracy, availability, and reliability when RTK corrections fail without additional cost.

### Web UI

It is able to view position status, set up working mode, download data and update firmware from Web user interface with any phone, tablet or PC.

### Intelligent Voice

E100 will broadcast voice automatically to remind user the solution status is changed. It is also able to manually broadcast current working mode and solution status by short pressing power button.

### Lightweight and Small-size

E100 is only 900g and is good for hand carrying. The small size design makes it possible for various of applications such as car and machine control.

### Rugged Design

E100 main body is using magnesium materials to provide strong shock and vibration resistant characteristics. IP67 certification ensures operation in various of tough environments.

# Product Specification

| GNSS                  |   | Voltage                     | 9~28 VD, with over-voltage protection                               |   |
|-----------------------|---|-----------------------------|---|---|
| Satellites Tracking   | GPS: L1CA/L1P/L1C/L2P/L2C/L5<br>BDS: B1I/B2I/B3I/B1C/B2a/B2b/<br>ACEBOC<br>GLONASS: G1/G2/G3, P1/P2<br>GALILEO: E1/E5a/E5b/E6/ALTB0C<br>QZSS: L1CA/L1C/L2C/L5/LEX<br>IRNSS: L5<br>SBAS <sup>1</sup> : L1, L5<br>L-Band: Atlas H10/H30/Basic | Working Time                | RTK: 10 hours<br>Static: 14 hours                                   |   |
|                       | Channels  | 800                         | Charging Time   | Typically 4 hours                                       |
|                       | Signal Reacquisition  | < 1 sec                     | <b>Internet Modem</b>   |   |
|                       | Cold Start  | < 60 sec                    | Support Band  | Global 4G   |
|                       | Warm Start  | < 30 sec                    | <b>Communication</b>  |   |
|                       | Hot Start   | < 10 sec                    | Bluetooth   | BT 5.0, BLE   |
|                       | RTK Signal Initialization   | < 8 sec                     | WIFI  | 802.11 b/g/n(HT20)/ac                                   |
|                       | Initialization Reliability  | > 99.9%                     | SIM Card  | Support   |
|                       | Update Rate   | 10 Hz standard, up to 50 Hz | 5-pin Port  | Connect to external radio and power<br>NMEA data output |
|                       | Operation System  | Linux                       | Type-C Port   | Charge and data transmission                            |
| Internal Memory       | 8 GB (32GB Customizable)  | Web UI                      | View status, update firmware, set up<br>working mode, download data |   |
| <b>Performance</b>    |   | Intelligent Voice           | Broadcast working status  |   |
| High Precision Static | H: 2 mm + 0.1 ppm<br>V: 3 mm + 0.4 ppm  | NMEA Output                 | GGA, ZDA, GSA, GSV, GST, VTG, RMC,<br>GLL, Binary                   |   |
| Static/Fast Static    | H: 2.5 mm + 0.1 ppm<br>V: 3.5 mm + 0.4 ppm  | Correction Data             | CMR, CMR+, RTCM2, RTCM3, RTCM32                                     |   |
| RTK                   | H: 8 mm + 1 ppm<br>V: 15 mm + 1 ppm   | MEMS                        | Fast initialization, dynamic tilt survey<br>up to 60°               |   |
| Code Differential     | H: 0.25 m<br>V: 0.45 m  | <b>Physical</b>             |   |   |
| SBAS                  | H: 0.3 m<br>V: 0.6 m  | Dimension                   | Φ148 mm x H60 mm  |   |
| L-Band                | Atlas H10: 4 cm RMS<br>Atlas H30: 15 cm RMS<br>Atlas Basic: 30 cm RMS   | Weight                      | 900±5 g   |   |
| <b>Power Supply</b>   |   | Operating Temperature       | -40°C ~ +65°C   |   |
| Battery               | Rechargeable and built-in Lithium-ion<br>battery, 7.2 V ~ 6800 mAh  | Storage Temperature         | -45°C ~ +80°C   |   |
|                       |   | Water/Dust Proof            | IP67  |   |
|                       |   | Shock                       | Survive a 2 m drop on concrete floor                                |   |
|                       |   | Vibration                   | Vibration resistant   |   |
|                       |   | Humidity                    | Up to 100%  |   |
|                       |   | Indicators                  | Satellites, datalink, battery, Bluetooth                            |   |
|                       |   | Button                      | Power button, short press to voice<br>broadcast status              |   |
|                       |   | Certificate                 | CE, FCC, NGS Calibration  |   |

1. SBAS supports WAAS, EGNOS, GAGAN, SDCM, MSAS.



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