

E100



2020.12.11 by eSurvey GNSS

E100

SUMMARY

- Overview
- Key Features
- Specifications
- Configurations
- Software



Overview

- $\Phi 148\text{mm} * 62\text{mm}$
- 900g
- Internal 4G
- Type-C Charge
- Build-in Battery



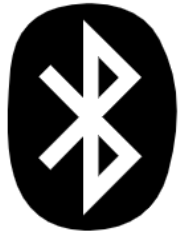
Key Features

- All GNSS Signals: 800 channels



Key Features

- Communication



Bluetooth



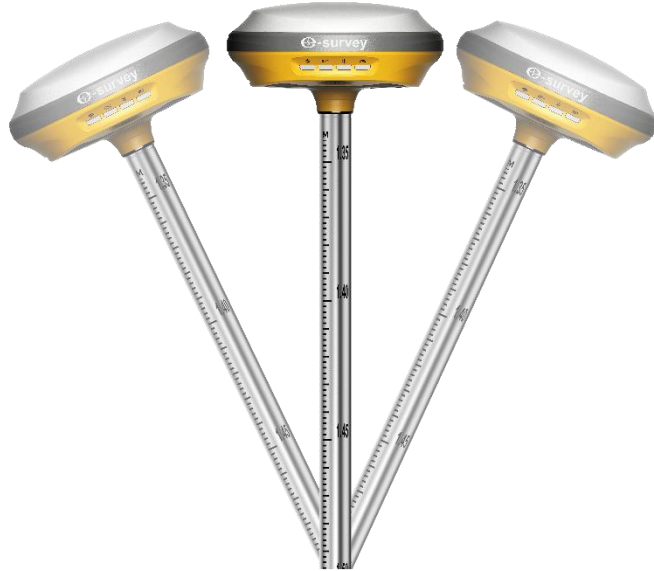
WIFI



4G Network

Key Features

- IMU Tilt Survey



The New E100 is equipped with IMU sensor.

- Fast initialization
- Tilt to go
- Tilt stakeout
- Up to 60°
- Accuracy <3cm
- Free from magnetic interference

Key Features

- ATLAS: GNSS Global Correction Service



<i>Service Level</i>	<i>Position Accuracy</i>
Atlas Basic	50 cm 95% (30 cm ^{RMS})*
H30	30 cm 95% (15 cm ^{RMS})*
H10	8 cm 95% (4 cm ^{RMS})*

Provide both Land Service and Offshore Service

Key Features

- ATLAS: GNSS Global Correction Service



Key Features

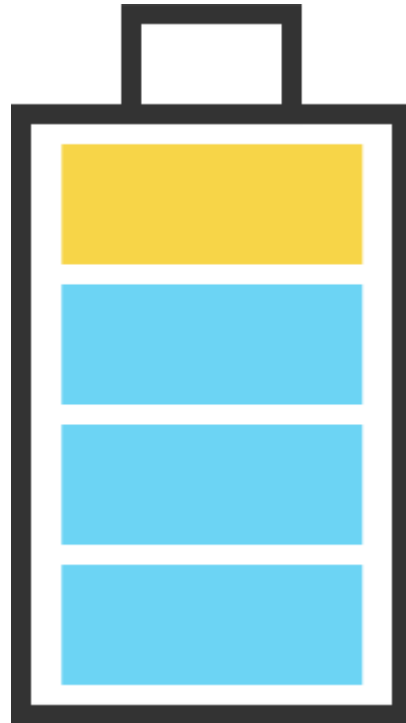
- aRTK: Free L-Band service



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.

Key Features

- Build-in Battery



Build-in Li-on Battery

- 7.2V, 6900mAh
- Up to 9 hours
- Full charge within 4 hours
- Support power bank

Key Features

- Web User Interface



The screenshot displays the web interface for a GNSS receiver. At the top, a blue header bar contains the device ID 'E100 E100371900008' on the left and the language 'English' on the right. Below the header, a left sidebar contains a vertical menu with items: Status, Position, Datalink, Satellites, Information, Settings (with a gear icon and a dropdown arrow), Working Mode, Satellite Settings, Device Configuration, NMEA Message, View Logs, Configuration Set, Download (with a download icon and a dropdown arrow), Raw Data, Backup Data, and Management (with an information icon). The main content area shows the 'Position' section selected, displaying the following data:

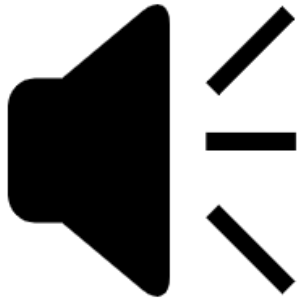
- System Mode: Rover
- Longitude: 121.530386321 °
- Latitude: 31.084406283 °
- Height: 62.697 m
- Status: Single
- Satellites: 31 [GPS: 9, BeiDou: 10, Glonass: 4, Galileo: 8]
- PDOP: 0.926
- HDOP: 0.484
- TDOP: 0.513
- HRMS: 0.969
- VRMS: 1.579
- Local Time: 2019-06-10 14:42:30
- UTC Time: 2019-06-10 06:42:30

Smart Web User Interface

- Connect PC, phone and tablet
- View device status
- Setup working mode
- Download raw data
- Update firmware

Key Features

- Additional Features



Smart Voice



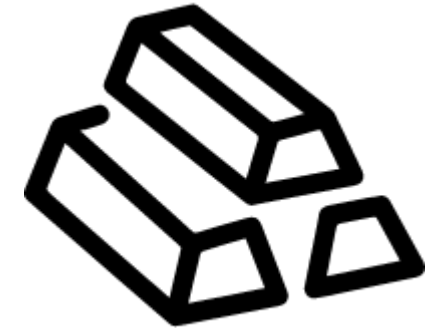
IP67



1.2m Drop



-30°C ~ +65°C



Magnesium Alloy









Specifications

GNSS		Voltage	9~28 VD, with over-voltage protection
Satellites Tracking	GPS: L1CA/L1P/L1C/L2P/L2C/L5 BDS: B1I/B2I/B3I/B1C/B2a/B2b/ ACEBOC GLONASS: G1/G2/G3, P1/P2 GALILEO: E1/E5a/E5b/E6/ALTBOC QZSS: L1CA/L1C/L2C/L5/LEX IRNSS: L5 SBAS ¹ : L1, L5 L-Band: Atlas H10/H30/Basic	Working Time	RTK: 10 hours Static: 14 hours
	Channels	800	Charging Time
Signal Reacquisition	< 1 sec	Internet Modem	
Cold Start	< 60 sec	Support Band	Global 4G
Warm Start	< 30 sec	Communication	
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	Micro SIM card
Update Rate	10 Hz standard, up to 50 Hz	5-pin Port	Connect to external radio and power 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 working mode, download data
Performance		Intelligent Voice	Broadcast working status
High Precision Static	H: 2 mm + 0.1 ppm V: 3 mm + 0.4 ppm	NMEA Output	GGA, ZDA, GSA, GSV, GST, VTG, RMC, GLL, Binary
Static/Fast Static	H: 2.5 mm + 0.1 ppm V: 3.5 mm + 0.4 ppm	Correction Data	CMR, CMR+, RTCM2, RTCM3, RTCM32
RTK	H: 8 mm + 1 ppm V: 15 mm + 1 ppm	MEMS	Fast initialization, dynamic tilt survey up to 60°
Code Differential	H: 0.25 m V: 0.45 m	Physical	
SBAS	H: 0.3 m V: 0.6 m	Dimension	Ø148 mm x H60 mm
L-Band	Atlas H10: 4 cm RMS Atlas H30: 15 cm RMS Atlas Basic: 30 cm RMS	Weight	900±5 g
Power Supply		Operating Temperature	-40°C ~ +65°C
Battery	Rechargeable and built-in Lithium-ion 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 broadcast status
		Certificate	CE, FCC, NGS Calibration








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

Configurations

E100 base and rover are using the same accessories. We provide easy carrying soft bag or hard carrying case.

E100 Soft Bag					
NO.	Items	Quantity	Model	Description	Picture
1	E100 Soft Bag	1	---	---	
2	E100 GNSS Receiver	1	---	---	
3	Charger	1	KSA-45P-45W D5	Type-C port	
4	Charger Plug	4	---	---	
5	Power Cable	1	---	Type-C to Type-C	
6	Straps	1	---	---	
7	SIM Cover	1	---	Spare SIM Cover	
8	Warranty Card	1	---	---	

Configurations

E100 Carrying Case					
NO.	Items	Quantity	Model	Description	Picture
1	E100 Carrying Case	1	---	Carry case for E100 Controller and bracket can be put inside	
2	E100 GNSS Receiver	1	---	---	
3	Charger	1	KSA-45P-45W D5	Type-C port	
4	Charger Plug	4	---	---	
5	Power Cable	1	---	Type-C to Type-C	
6	SIM Cover	1	---	Spare SIM Cover	
7	Warranty Card	1	---	---	

Data Collection Software-SurPad4.0

Positioning Informations

GPS
BD
GLN
GAL
SBAS

FIXED H:0.006
Age2 V:0.009

Point name: H:58.006
N:3439887.756 E:359820.049
Ant. H:1.8m+0.072m Base distance:0.0

e-survey

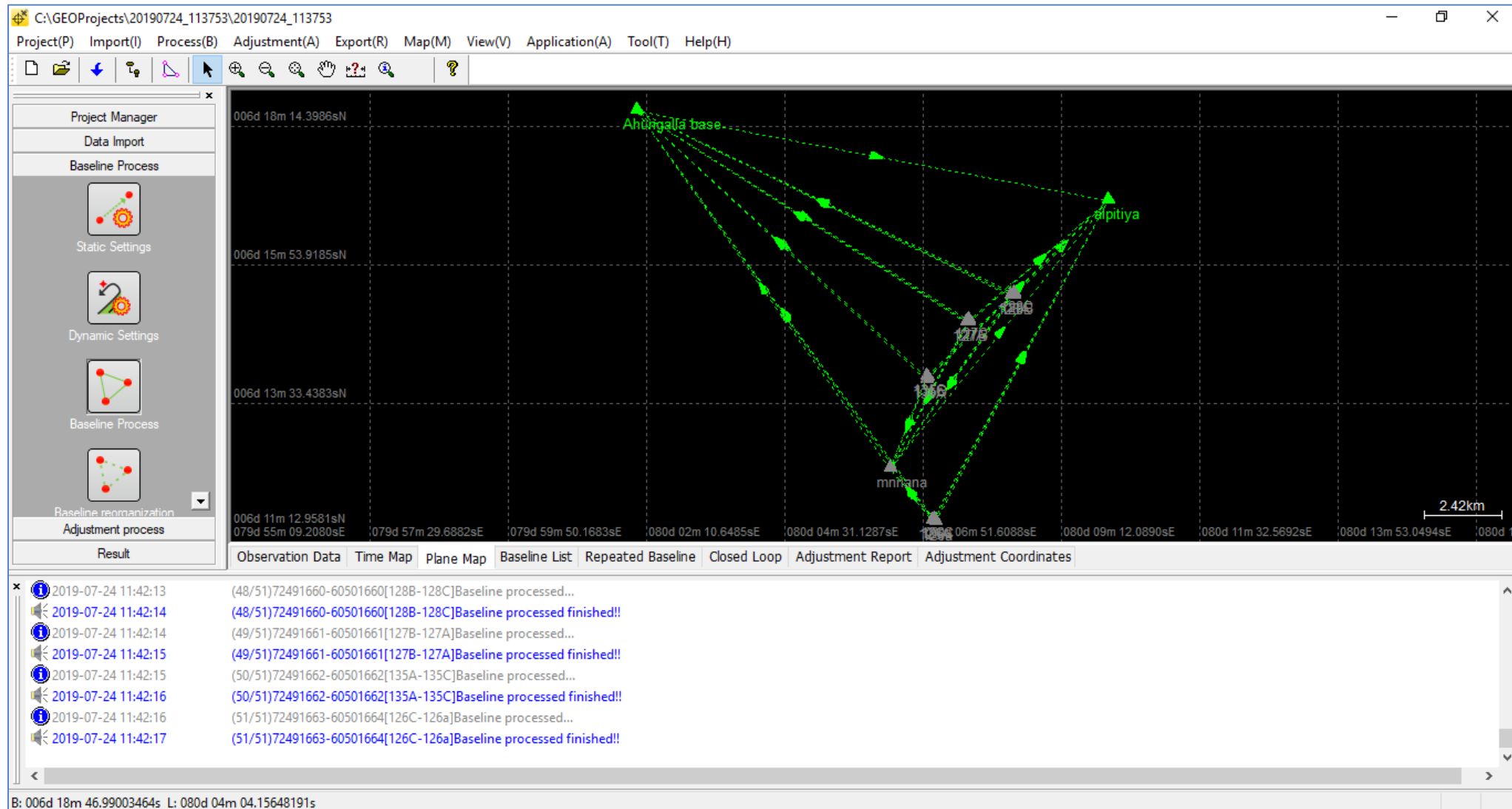
EASY TO SURVEY

CAD

FIXED H:0.005
Age2 V:0.007

4	Fill:1468.728
Slope:?	Dist to Bottom:?
:66739.347	Offset:(Left)48.545

Post Process Software-GEOSolution



THANK YOU

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