

# E300 GNSS Receiver

The shape design of E300 is inspired by flying saucer, which means future technology, and supports satellite station differential and satellite chain life, quick connection, intelligent voice, tilt survey, etc. The body is made of magnesium alloy, which is rugged and has better EMC characteristics, it creates a high-grade aesthetic feeling, simple yet sophisticated.



## Design

The shape of the E300 is inspired by the flying saucer, bringing the high performance and minimal structure of outer space.

## Interface

The interface adopts a concealed design for better protection, and Type-C charging and transmitting is a two-in-one function.

## Button

The receiver has only one power button, which is convenient for users to learn and use.

## Material

The body is made of magnesium alloy, which is rugged and has better EMC characteristics. The weight of the whole receiver is only 1.2kg.

## Protection

IP67, 2m drop-resistant design make the device worry-free.

## Intelligent voice

The receiver and controller software support TTS intelligent voice broadcast, and the broadcast content supports user customization.

## Electronic bubble

The built-in electronic bubble can display the horizontal situation on the controller, which is convenient for the surveyor to collect the detailed points in the field.

## WebUI

The user can connect to the receiver through a smartphone or other hardware products with WiFi function to perform settings, status check, survey data download and firmware upgrade, etc. Operating E300 can be as simple as surfing the Internet.

## Portable

Integrated design, wireless binding, a backpack can hold the whole rover.

## aRTK

In the RTK operation, when the differential link of the radio or network is interrupted, the aRTK function is used, and the accuracy of the RTK operation can be maintained for a certain period of time, and there is no dead angle in the satellite chain.

## Satellite station differential

Using a global framework reference station for differential data solving and broadcasting via satellite, users can achieve single-receiver centimeter positioning on a global scale, even if you are in the ocean, desert, gobi and other extreme environments, it can provide you with accurate coordinate data under the global framework.

## Tilt survey

The E300's built-in high-sensitivity tilt sensor, combined with the patented tilt survey algorithm, eliminates the need for calibration and is ready to use.

# Product Specification

GNSS		Interface	
Channel	600	TNC	Internal radio UHF antenna interface,
Satellite Tracked	GPS: L1CA/L1P/L1C/L2P/L2C/L5	Type-C	Direct charge and support external power
	GLONASS: G1/G2, P1/P2		supply, USB3.2 directly connected to the
	BeiDou: B1/B2/B3		computer, USB mode, etc.
	Galileo: E1BC/E5a/E5b	5-pin Interface	Serial port and external power supply
	QZSS: L1CA/L2C/L5/L1C	SIM card slot	NANO SIM
Update Rate	5Hz	Power Button	Short press, long press, hold,
Static Accuracy	Horizontal: $\pm (2+0.5 \times 10^{-6}D)$ mm		multiple applications
	Vertical: $\pm (3+0.5 \times 10^{-6}D)$ mm	Power Indicator	Display the battery power of receiver
RTK Accuracy	Horizontal: $\pm (4+1 \times 10^{-6}D)$ mm	Strip-type Indicator	Display the working status of receiver
	Vertical: $\pm (8+1 \times 10^{-6}D)$ mm	Voice	TTS voice broadcast
Power Supply		Environment	
Battery	Built-in battery, 7.2V 6800mAh	Operating Temperature	-45℃ ~ +65℃
Working time	No less than 10 hours	Storage Temperature	-50℃ ~ +80℃
Input Voltage	9~28V DC	Water/Dust Proof	IP67
Communication			IP68 (Russian Version)
Memory	8GB	Shock& Vibration	Survive a 2 m (6.6 ft) pole drop,
Bluetooth	V2.1+EDR / V4.1 Dual Mode, Class2		1.2 m (3.9 ft) free fall
WIFI	802.11 b/g/n	Humidity	100%, condensing
Internal UHF (Optional)	Transmit power 1w		
	Frequency 410-470MHz		
	Radio Protocol SATEL		
	PCC-EOT, TrimTalk 450S		
	South 9600, South 19200		
	HiTarget 9600, HiTarget 19200		
	TrimMark III (19200), TrimTalk1		
	GEOTALK, GEOMARK		
Network (Optional)	Support 4G		
Electric Bubble	Enable		
Physical			
Dimensions	φ180mm*76mm		
Weight	1.2kg		



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