

# E300 Pro GNSS Receiver

The shape design of E300 Pro 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 Pro 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 940g.

## 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 Pro can be as simple as surfing the Internet.

## Battery Checking

Check the battery level anytime with the unique LED power indicator.

## 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.

## L-Band: ATLAS

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

# Product Specification

GNSS Receiver		Internal Radio	
Channel *	700	Frequency Range	410 - 470 MHz
Satellite Tracking	GPS: L1CA/L1P/L1C/L2P/L2C/L5 GLONASS: G1, G2, G3 BeiDou: B1I, B2I, B3I, B1C, B2a, B2b, ACEBOC Galileo: E1, E5a, E5b, ALTB0C, E6 SBAS: L1/L5 IRNSS QZSS: L1C/A, L1C, L2C, L5, LEX L-Band: ATLAS H10/H30/H50	Channel Spacing	12.5 KHz / 25 KHz
Update rate	5 Hz, up to 50 Hz	Emitting Power	0.5 W / 1 W
Signal Reacquisition	< 1 sec	Operating Range	3 - 5 km typically
Hot Start	< 10 sec	Communication	
Initialization Reliability	> 99.9%	5-pin	Connect to external power and radio
Memory	16 GB	Type-C	For charging and data transmission
Performance (RMS) <sup>1</sup>		SIM Card	NANO SIM
Static Accuracy	Horizontal: 2.5 mm + 0.5 ppm Vertical: 5 mm + 0.5 ppm	Cellular *	Global 4G
RTK Accuracy	Horizontal: 8 mm + 1 ppm Vertical: 15 mm + 1 ppm	Bluetooth	V2.1+EDR / V4.1 Dual Mode, Class 2
Code Differential	Horizontal: 0.25 m	WiFi	802.11 ac/n/b/g/n
SBAS Accuracy	Horizontal: 0.3 m	WebUI	Update firmware, manage settings and status, download data
Power Supply		Voice	Support TTS voice broadcast
Battery	Rechargeable, built-in Lithium-ion battery 7.2 V - 6800 mAh	Electronic Bubble	Support
Voltage	9~28 V DC external power input	MEMS *	Support
Working Time	Up to 12 hours	NMEA Output	GGA, ZDA, GSA, GSV, GST, VTG, RMC, GLL
Charge Time	Typically 4 hours	Physical Specifications	
		Dimensions	φ158 mm x 53 mm
		Weight	940 g
		Operating Temperature	-30 C ~ +65 C
		Storage Temperature	-40 C ~ +80 C
		Water/Dust Proof	IP67
		Shock	Survive a 2 m pole drop on concrete floor 1.2 m free drop
		Vibration	Vibration resistant
		Humidity	Up to 100%
		Indicator	Satellites, Datalink, Battery level, Bluetooth Smart battery indicator

Illustrations and technical specifications are subject to change without notice.

1. The accuracy claimed is based on the optimal environment.



## Forest it Design

Forest it Design ist einer der führenden Provider von robusten mobilen Computern, all-in-one PCs, Messinstrumenten und GPS/GNSS Lösungen. Das Unternehmen hat Büros in Värnamo, Göteborg, London, München und Frankfurt.

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