

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



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