e-survey

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	
Channel *	700
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, ALTBOC, E6
	SBAS: L1/L5
	IRNSS
	QZSS: L1C/A, L1C, L2C, L5, LEX
	L-Band: ATLAS H10/H30/H50
Update rate	5 Hz, up to 50 Hz
Signal Reacquisition	< 1 sec
Hot Start	< 10 sec
Initialization Reliability	> 99.9%
Memory	16 GB
Performance (RMS)[1]	
Static Accuracy	Horizontal: 2.5 mm + 0.5 ppm
	Vertical: 5 mm + 0.5 ppm
RTK Accuracy	Horizontal: 8 mm + 1 ppm
	Vertical: 15 mm + 1 ppm
Code Differential	Horizontal: 0.25 m
SBAS Accuracy	Horizontal: 0.3 m
Power Supply	
Battery	Rechargeable, built-in Lithium-ion battery
	7.2 V - 6800 mAh
Voltage	9~28 V DC external power input
Working Time	Up to 12 hours
Charge Time	Typically 4 hours

Internal Radio	
Frequency Range	410 - 470 MHz
Channel Spacing	12.5 KHz / 25 KHz
Emitting Power	0.5 W / 1 W
Operating Range	3 - 5 km typically
Communication	
5-pin	Connect to external power and radio
Type-C	For charging and data transmission
SIM Card	NANO SIM
Cellular *	Global 4G
Bluetooth	V2.1+EDR / V4.1 Dual Mode, Class 2
WIFI	802.11 ac/n/b/g/n
WebUI	Update firmware, manage settings and
	status, download data
Voice	Support TTS voice broadcast
Electronic Bubble	Support
MEMS *	Support
NMEA Output	GGA, ZDA, GSA, GSV, GST, VTG, RMC, GLL
Physical Specifications	
Dimensions	φ158 mm x 53 mm
Weight	940 g
Operating Temperature	-30℃ ～ +65℃
Storage Temperature	-40℃ ～ +80℃
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 är en ledande leverantör av ruggade mobila datorer, All-In-One PC, mätinstrument samt GPS/GNSS-lösningar. Företaget har kontor i Värnamo och Göteborg, samt i England och Tyskland.

Värnamo
0370-69 08 10

Göteborg
031-20 30 80

E-post
mail@forest-it.se

Hemsida
www.forest-it.se

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