



E300 Pro

Full-featured RTK Receiver

E300 Pro is a new generation product by eSurvey GNSS. The durable IP67 design makes it possible to work in various of environments. Multi constellation and frequency tracking always gives a Fixed solution for your job. Thanks for the small-size design, E300 Pro is suitable for different applications such as car and machine control.

Multi-constellation and multi-frequency

With 800 channels of GNSS tracking, E300 Pro provides stable and reliable accuracy. All GNSS signals are coming with standard including GPS, BDS, GLONASS, GALILEO, QZSS, IRNSS and SBAS.

Intelligent Battery LED Indicators

Without powering on device, it is able to check the battery level on the battery LED indicators by simply clicking the power button.

MEMS Dynamic Tilt Survey

eSurvey' s innovation tilt survey solution provides a surprising experience. The sensor is adapted to various of working environments and can be ready within 10 sec. Maximum 60 ° incline angle ensures a tilt-to-go survey without stopping your work.

L-band Atlas

Atlas is a service to provide global precision correction service over L-band satellites. With ATLAS subscription, E300 Pro is able to achieve centimeter accuracy without any base station.

aRTK

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 without additional cost.

Web UI

It is able to view position status, set up working mode, download data and update firmware from Web user interface with any phone, tablet or PC.

Intelligent Voice

E300 Pro will broadcast voice automatically to remind user the solution status is changed. It is also able to manually broadcast current working mode and solution status by short pressing power button.

Rugged Design

E300 Pro main body is using magnesium materials to provide strong shock and vibration resistant characteristics. IP67 certification ensures operation in various of tough environments.

Product Specification

GNSS		Internal Radio	
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	Type	TX and RX
		Frequency Range	410 ~ 470 MHz
		Channel Spacing	12.5 KHz / 25 KHz
		Emitting Power	1 W
		Operation Range	3 ~ 5 Km typically 10 Km with optimal conditions ²
		Protocol	Satel, PCC, TrimTalk, TrimMark III, South, HiTarget
		Internet Modem	
		Support Band	Global GSM /WCDMA/LTE
		Communication	
		Bluetooth	BT 5.0, BLE
Channels	800	WIFI	802.11 ac/n(HT20)a/b/g
Signal Reacquisition	< 1 sec	SIM Card	NANO SIM card
Cold Start	< 60 sec	5-pin Port	Connect to external radio and power, NMEA output
Warm Start	< 30 sec	Type-C Port	Charge and internal storage access
Hot Start	< 10 sec	TNC Port	Connect to internal radio antenna
RTK Signal Initialization	< 8 sec	Web UI	View status, update firmware, set up working mode, download data
Initialization Reliability	> 99.9%	Intelligent Voice	Broadcast working status
Update Rate	10 Hz standard, up to 50 Hz	NMEA Output	GGA, ZDA, GSA, GSV, GST, VTG, RMC, GLL, Binary
Operation System	Linux	Correction Data	CMR, CMR+, RTCM2, RTCM3, RTCM32
Internal Memory	8 GB	MEMS	Fast initialization, dynamic tilt survey up to 60°
Performance		Physical	
High Precision Static	H: 2 mm + 0.1 ppm V: 3 mm + 0.4 ppm	Dimension	Φ158 mm x H53 mm
Static/Fast Static	H: 2.5 mm + 0.1 ppm V: 3.5 mm + 0.4 ppm	Weight	940 g
RTK	H: 8 mm + 1 ppm V: 15 mm + 1 ppm	Operating Temperature	-40°C ~ +65°C
Code Differential	H: 0.25 m V: 0.45 m	Storage Temperature	-45°C ~ +80°C
SBAS	H: 0.3 m V: 0.6 m	Water/Dust Proof	IP67
L-Band	Atlas H10: 4 cm RMS Atlas H30: 15 cm RMS Atlas Basic: 30 cm RMS	Shock	Survive a 2 m drop on concrete floor
Power Supply		Vibration	Vibration resistant
Battery	Rechargeable and built-in Lithium-ion battery, 7.2 V ~ 6800 mAh	Humidity	Up to 100%
Voltage	9~28 VDC with over-voltage protection	Indicators	Satellites, datalink, battery, Bluetooth
Working Time	Up to 12 hours	Button	Power button, short press to voice broadcast status
Charging Time	Typically 4 hours	Certificate	CE, FCC, NGS Calibration

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

2. Depend on the environment and electromagnetic interference.



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