



# 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 ap plications such as car and ma chine 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, avail ability, and reliability when RTK corrections fail without additional cost.

#### Web U

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	
	GPS: L1CA/L1P/L1C/L2P/L2C/L5	Туре	TX and RX
Satellites Tracking	BDS: B1I/B2I/B3I/B1C/B2a/B2b/ ACEBOC GLONASS: G1/G2/G3, P1/P2	Frequency Range	410 ~ 470 MHz
		Channel Spacing	12.5 KHz / 25 KHz
		Emitting Power	1 W
	GALILEO: E1/E5a/E5b/E6/ALTBOC	Operation Range	3 ~ 5 Km typically
	QZSS: L1CA/L1C/L2C/L5/LEX		10 Km with optimal conditions <sup>2</sup>
	IRNSS: L5	Protocol	Satel, PCC, TrimTalk, TrimMark III,
	SBAS <sup>1</sup> : L1, L5		South, HiTarget
Charant	L-Band: Atlas H10/H30/Basic		, ,
Channels	800	Internet Modem	
Signal Reacquisition	<1 sec	Support Band	Global GSM /WCDMA/LTE
Cold Start	< 60 sec	-	, ,
Warm Start	< 30 sec	<ul> <li>Communication</li> </ul>	
Hot Start	< 10 sec	Bluetooth	BT 5.0, BLE
RTK Signal Initialization	< 8 sec	WIFI	802.11 ac/n(HT20)a/b/g
Initialization Reliability	> 99.9%	SIM Card	NANO SIM card
Update Rate	10 Hz standard, up to 50 Hz	- Silvi Caru	Connect to external radio and power,
Operation System	Linux	– 5-pin Port	NMEA output
Internal Memory	8 GB	Type-C Port	Charge and internal storage access
Performance		TNC Port	Connect to internal radio antenna
Performance	H: 2 mm + 0.1 ppm	Web UI	View status, update firmware, set up
High Precision Static	V: 3 mm + 0.4 ppm		working mode, download data
	H: 2.5 mm + 0.1 ppm	Intelligent Voice	Broadcast working status
Static/Fast Static	V: 3.5 mm + 0.4 ppm	- NMEA Output	GGA, ZDA, GSA, GSV, GST, VTG, RMC,
	H: 8 mm + 1 ppm		GLL, Binary
RTK	V: 15 mm + 1 ppm	Correction Data	CMR, CMR+, RTCM2, RTCM3, RTCM32
Code Differential	H: 0.25 m	MEMS	Fast initialization, dynamic tilt survey
	V: 0.45 m		up to 60°
	H: 0.3 m	-	'
SBAS	V: 0.6 m	Physical	
L-Band	Atlas H10: 4 cm RMS	Dimension	Ф158 mm x H53 mm
	Atlas H30: 15 cm RMS	Weight	940 g
	Atlas Basic: 30 cm RMS	Operating Temperature	-40°C ~ +65°C
		Storage Temperature	-45°C ~ +80°C
Power Supply		- Water/Dust Proof	IP67
Battery	Rechargeable and built-in Lithium-ion battery, 7.2 V ~ 6800 mAh	Shock	Survive a 2 m drop on concrete floor
		- Vibration	Vibration resistant
Voltage	9~28 VDC	Humidity	Up to 100%
	with over-voltage protection	Indicators	Satellites, datalink, battery, Bluetooth
Working Time	Up to 12 hours	-	Power button, short press to voice
Charging Time	Typically 4 hours	Button	broadcast status
		Certificate	CE, FCC, NGS Calibration

- 1. SBAS supports WAAS, EGNOS, GAGAN, SDCM, MSAS.
- 2. Depend on the environment and electromagnetic interference.



