e-survey

E600

RUGGED & ALL-FUNCTIONAL GNSS RECEIVER

The eSurvey E600 is an innovative GNSS receiver that delivers unmatched GNSS performance, speed and accuracy to improve your productivity. The dual rechargeable and removable batteries make no interruption to your surveying work. The E600 is perfect for survey professionals who need to collect highly accurate data in a wide range of geospatial applications.

GNSS Receiver

Hot-swappable Batteries: Constant & Mobile Power Supply

Help to eliminate power-related downtime and maximize power availability and productivity, given that there are enough charged batteries on hand. Quickly check the remaining battery power with just one click of the button on the battery.

RTK Aid Function: Uninterrupted Work

Work without interruption even when RTK corrections fail, powered by our RTK aid function.

8GB Internal Memory + TF Card Extension

The built-in 8GB internal memory and TF card extension slot allow more data storage for a longer time.

Rugged Design: Better Resistance to Shock and Fall

Use it for many years, thanks to its strongly made and capable of withstanding rough handling.

Advanced Long-Range Tx/Rx UHF Modem

Integrated with the long range UHF modem, the E600 is compatible with ltraditional major radio protocols. The maximu communication distance can reach 10 km with 1 transmit power in urban environments.

Max 60° Tilt Survey: A Different Way of Working

- Quickly measure accurate points while standing or walking without leveling the pole.
- Concentrate on where the pole tip needs to go, which is especially useful during a stakeout.
- Easily start a survey in environments that are hard to reach, such as building corners and slopes.
- No longer worry about the movement of the pole when measuring, provided that the pole tip is stationary.

Website & Social media

Product Specification

E600

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GNSS Performance		
Satellites tracking	GPS	L1 C/A, L1C, L2P(Y), L2C, L5
	BDS	B1I, B2I, B3I, B1C, B2a, B2b
	GLONASS	L1, L2, L3
	Galileo	E1, E5a, E5b, E6
	QZSS	L1, L2, L5
	NavIC	L5
	SBAS	WAAS, GAGAN, MSAS, EGNOS, SDCM, BDS
	L-Band	B2b PPP (Only for the Asian-Pacific region), HAS [1]
Channels		1408
Signal reacquisition		< 1 second
Cold start		< 30 seconds
Warm start		< 20 seconds
Hot start		< 5 seconds
RTK signal initialization		< 5 seconds
Initialization reliability		> 99.9%
Update rate		20 Hz
High precision static		■ H: 2.5 mm + 0.1 ppm (RMS) ■ V: 3.5 mm + 0.4 ppm (RMS)
Static and Fast Static		■ H: 2.5 mm + 0.5 ppm (RMS) ■ V: 5 mm + 0.5 ppm (RMS)
RTK		■ H: 8 mm + 1 ppm (RMS) ■ V: 15 mm + 1 ppm (RMS)
Standard point positioning		■ H: 1.5 m (RMS) ■ V: 2.5 m (RMS)
Code differential		■ H: 0.4 m (RMS) ■ V: 0.8 m (RMS)
SBAS		■ H: 0.3 m (RMS) ■ V: 0.6 m (RMS)
Correction data		RTCM V3.X, RTCM2.X, CMR
Data output		GGA, ZDA, GSA, GSV, GST, VTG, RMC, GLL, Binary

Power Supply	
Battery	Removable and rechargeable Hot-swappable Lithium-ion battery x 2 7.2 V ~ 3400 mAh x2
Voltage	9 - 28V DC
Working time	Up to 22 hours as rover
Charging time	Typically 4 hours

Internet Modem	
Supported band	Global 4G ■ LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28 ■ LTE TDD: B38/B39/B40/B41 ■ WCDMA: B1/B2/B4/B5/B6/B8/B19 ■ GSM: 850/900/1800/1900 MHz

System	
Operation system	Linux
Internal memory	8GB (Support TF card extension, maximum 32 GB)
Bluetooth	BT5.0+EDR, BLE
Wi-Fi	802.11 a/b/g/n/ac
SIM card	✓
TF card	✓
TNC	Connect internal radio with antenna
5-pin port	Connect to external radio and external power
7-pin port	NMEA output, internal storage access
Web UI	View status, update firmware, set up working mode, download data, etc.
Intelligent voice	Broadcast working mode and status
Tilt sensor	MEMS Fast initialization, dynamic tilt survey up to 60°

Physical	
Dimension	Φ156 mm x H76 mm
Weight	1300 g
Operating temperature	-30℃ - +65℃
Storage temperature	-40℃ - +80℃
Water / dust proof	IP68
Shock	■ Withstand topple over from a 2 m survey pole onto hard surfaces ■ Survive a 1.2 m free drop
Vibration	Vibration resistant
Humidity	Up to 100%
Indicators	Satellites, datalink, battery, Bluetooth
Button	Power button, short press to voice broadcast working mode and status
Certificate	CE, FCC, NGS, IGS

Internal Radio	
Type	TX and RX
Emitting Power	1 W / 2 W
Operation Range	■ 3 - 5 km typically ■ up to 15 km with optimal conditions [2]
Frequency range	410 - 470 MHz
Channel spacing	6.25 kHz [3] / 12.5 kHz / 25 kHz
Protocol	TRIMTALK, TRIMMK III , SOUTH, TRANSEOT, GEOTALK, GEOMK3, SATEL, HITARGET, HZSZ, PCCEOT, PCCEOT_SATEL, PCCFST, PCCFST_ADL, SATEL_ADL, FARLINK, elink_Ultra, geotalk_Ultra

1: It will be supported through future firmware update.

2: It varies with the obstacle and terrain.

3: It is only available for radio protocol "Satel", and the radio firmware is later than G001.02.27.

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