E600

RUGGED & ALL-FUNCTIONAL 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.

■ **RTK Assistant Technology: Uninterrupted Work**

Work without interruption even when RTK corrections fail, powered by our RTK assistant technology.

■ **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.

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.

Specification

GNSS Performance

Satellites tracking	GPS	L1CA, L2P(Y), L2C, L5
	BDS	B1I, B2I, B3I, B1C, B2a, B2b[1]
	GLONASS	L1, L2
	GALILEO	E1, E5a, E5b, E6[1]
	QZSS	L1, L2, L5, L6[1]
	L-Band	B2b PPP (Only for the Asian-Pacific region)
Channels		1408
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: 3 mm + 1 ppm RMS ■ V: 5 mm + 1 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
Correction data		RTCM V3.X, RTCM2, CMR
Data output		GGA, ZDA, GSA, GSV, GST, VTG, RMC, GLL, Binary

Power Supply

Battery	Rechargeable Built-in Lithium-ion battery x 2 7.2 V ~ 3400 mAh x 2
Voltage	9 - 28V dc
Working time	Up to 10 hours
Charging time	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 ■ UMTS: B1, B2, B4, B5, B6, B8, B19 ■ GSM: B2, B3, B5, B8

System

Operation system	Linux
Internal memory	8 GB (Support TF card extension, maximum 32 GB)
Bluetooth	BT5.0+EDR, BLE
Wi-Fi	802.11 a/b/g/n/ac
SIM card	√
TNC	Connect internal radio with antenna
5-pin port	Connect to external radio and external power
Type-C port	Charge and data transmission
Web UI	View status, update firmware, set up working mode, download data, etc.
Intelligent voice	Broadcast working mode and status
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	IP67
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

Internal Radio

Type	TX and RX
Emitting Power	1 W
Operation Range	■ 3-5 km typically ■ 10 km with optimal conditions[2]
Frequency range	410 - 470 MHz, 902.4 - 928 MHz[4]
Channel spacing	6.25 KHz[3] / 12.5 KHz / 25 KHz / 280 KHz[4]
Protocol	Satel, PCC, TrimTalk, TrimMark III, TRANSEOT(PCC-GMSK), South, HiTarget, GEOTALK, GEOMK3, HZSZ, 900M Hopping[4]

1: It is not supported for now. It will be supported after firmware update in the future.

2: It depends on the environment and electromagnetic interference.

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

4: It is only available for certain radio module.