



# E800

## GNSS Receiver

E800 integrated intelligent receiver is a new generation of surveying product. It is a high-end of RTK receiver, using magnesium-aluminum alloy. The highly integrated body has excellent ability of heat dissipation and anti-interference, high precision, more stability, strong compatibility and environmental applicability. Build-in 13600 mAh battery and 5-watt radio to make a change to your survey job!

### Built-in radio (5W)

Up to 10km transmission distance, 410-470Mhz full-band, compatible with major transmission protocols.

### Superior anti-interference ability

Stronger signal acquisition capability in harsh environments.

### Built-in battery (13600mAh)

For longer lasting operation.

### Magnesium-aluminum alloy design

Excellent heat dissipation.

### Built-in 4G network module

Global 4G network module, support NTRIP mode.

### LCD Display

Sunlight viewable screen, support touch operation.

### Built-in Bluetooth, WiFi communication module

With smart WebUI, it will be more convenient to view device status and configure the working mode.

### Tilt survey

The E800 receiver integrates MEMS sensor, combined with a new tilt survey algorithm and SurPad4.0 software operation, the accuracy of coordinate data can be easily achieved within 60° tilt angle.

# Product Specification

GNSS Performance		Internal Radio	
Channel	800	Frequency Range	410 - 470 MHz
Satellite Tracking	GPS:L1CA/L1P/L1C/L2P/L2C/L5	Channel Spacing	12.5 KHz / 25 KHz
	GLONASS: G1/G2, P1/P2	Emitting Power	2 W / 5 W
	BeiDou:B1/B2/B3	Operating Range	5-10km typically
	GALILEO: E1BC/E5a/E5b	Communication	
	SBAS: L1 CA/L5	Memory	Internal 32G
	QZSS: L1CA/L2C/L5/L1C	5-pin	External radio and external power, RS232
	L-BAND: ATLAS H10/H30/H50	Type-C	Charge and access internal storage
Update rate	5 Hz, up to 20 Hz	SIM Card	Micro SIM card
Performance (RMS) <sup>1</sup>		Cellular	Global Version
Signal Reacquisition	< 1 sec		GSM/UMTS/LTE
Hot Start	< 10 sec	Bluetooth	BT 5.0, BLE
Initialization Reliability	> 99.9%	WIFI	802.11ac/n(HT20)/a/b/g
Static Accuracy	Horizontal: 2.5 mm + 0.1 ppm	WebUI	To manage the status and settings, upgrade firmware,data download
	Vertical: 3.5 mm + 0.4 ppm	Voice	Support smart voice broadcast
RTK Accuracy	Horizontal: 8 mm + 1 ppm	MEMS	Support, up to 60°
	Vertical: 15 mm + 1 ppm	NMEA Output	GGA, ZDA, GSA, GSV, GST, VTG, RMC, GLL
Code Differential	Horizontal: 0.25 m	Physical Specifications	
SBAS Accuracy	Horizontal: 0.3 m	Dimension	154 * 154 * 76mm (L * W * H)
Power Supply		Weight	1.5KG
Battery	Built-in rechargeable battery 7.2V/13.6Ah	Screen	1.45" colorful touchable
Voltage	9~28 V DC,with over-voltage protection	Operating Temperature	-30℃ ~ +65℃
Working Time	Typically 12 hours - 2W,base radio	Storage Temperature	-40℃ ~ +80℃
	Typically 8 hours - 5W,base radio	Water/ Dust Proof	IP67
	Typically 15 hours - base network mode	Shock	Survive a 2 m (6.6 ft) pole drop, 1.2 m (3.9 ft) free fall
	Typically 15 hours - rover radio	Vibration	Vibration resistant
	Typically 15 hours - rover network	Humidity	Up to 100%
Charge Time	PD quick charge, typically 5 hours	Indicator	4 indicators , GNSS/BT/UHF/PWR
		Certificate	CE, FCC, IP67

Illustrations and technical specifications are subject to change without notice.

1. The accuracy claimed is based on the optimal environment.



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