

E600 GNSS Receiver

The E600 receiver can track all current satellite constellations and signals, including GPS/GLON-ASS/BEIDOU/GALILEO/QZSS, etc.The new generation of Athena RTK engine effectively improves RTK initialization success rate and initialization accuracy in harsh environments, and supports long-baseline RTK solution, which is an effective guarantee for high-efficiency and high-precision RTK operations.

Multi-constellation satellite tracked

GPS,GLONASS,BDS,GALILEO,SBAS,QZSS

O-survey

survey

Built-in radio supports more protocols

Transmit power 1W, effective working distance is 5km in the optimal work environment.

Intelligent dual batteries

Support up to 10 hours of work time, battery power can be read directly from the indicator light on the battery, the battery models of handheld device and host are same.

Built-in 4G network module

Global 4G network module.

Web UI

Access the Web page, complete the receiver configuration, download data, upgrade firmware, view status, etc. through the mobile phone, tablet and other handheld devices.

MEMS Tilt Survey

The E600 receiver integrates with MEMS sensor to provide real time tilt survey result. The accuracy of coordinate data can be easily achieved within 60° tilt angle.

Product Specification

ModelE600-HFrequency Range40-470 MHzChannel60Channel Spacing12.5 KHz / 25 KHzSatellite TrackingGPS11C/J-LP/LC/L2P/LC/L5Gunera5.5 KH / 25 KHzBIODALSGIONASS GF / GZ, PI/P2Operaling Range3.5 km / 10.4	GNSS Receiver		Internal Radio	
Satellite Tracking GPS:L1CA/L1P/L1CL2P/L2C/L5 Emilting Power 0.5 W / 1 W GLONASS: G1/G2, P1/P2 Operating Range 3 - 5 km typically BelDou:B1/B2/B3 Communication GALLLEO: E1BC/E5a/E5b Memory Internal 8 GB, expansion up to 32 GB SBAS: L1 CA/L5 5-pin Connect to external power and radio QZSS: L1CA/L2C/L5L1C 7-pin NMEA output and data download LBAND: ATLAS H10/H30/H50 SIM Card Micro SIM card Update rate 5 Hz, up to 20 Hz Cellular Global Version Performance (RIMS)' Signal Reacquisition <1 sec	Model	E600-H	Frequency Range	410 - 470 MHz
GLONASS: G1/G2, P1/P2 Operating Range 3 - 5 km typically BeiDou:B1/B2/B3 Communication GALILEO: E1BC/E5a/E5b Memory Internal 8 GB, expansion up to 32 GB SBAS: L1 CA/L5 5-pin Connect to external power and radio QZSS: L1CA/L2C/L5/L1C 7-pin NMEA output and data download LBAND: ATLAS H10/H30/H50 SIM Card Micro SIM card Update rate 5 H2, up to 20 Hz Cellular Goldol Version Performance (RMS) SS SSMS/EDGE/LTE/UMTS/WCDMA Signal Reacquisition <1 sec	Channel	600	Channel Spacing	12.5 KHz / 25 KHz
BeilDou:B1/B2/B3 Communication GALILEO: E1BC/E5a/E5b Memory Internal 8 GB, expansion up to 32 GB SBAS: L1 CA/L5 5-pin Connect to external power and radio QZSS: L1CA/L2C/L5/L1C 7-pin NMEA output and data download L-BAND: ATLAS H10/H30/H50 SIM Card Micro SIM card Update rate 5 Hz, up to 20 Hz Cellular Global Version Performance (RMS) ¹ GSM/GPRS/EDGE/LTE/UMTS/WCDMA Signal Reacquisition <1 sec	Satellite Tracking	GPS:L1CA/L1P/L1C/L2P/L2C/L5	Emitting Power	0.5 W / 1 W
Internal 8 GB. Ex BG/E5a/E5bMemoryInternal 8 GB. expansion up to 32 GBSBAS: L1 CA/L55-pinConnect to external power and radioQZSS: L1CA/L2C/L5/L1C7-pinNMEA output and data downloadLBAND: ATLAS H10/H30/H50SIM CardMicro SIM cardUpdate rate5 Hz, up to 20 HzCellularGlobal VersionPerformance (RMS)*SIM CardV2.1+EDR / V4.1 Dual Mode, Class 2Signal Reacquisition<1 sec		GLONASS: G1/G2, P1/P2	Operating Range	3 - 5 km typically
SBAS: L1 CA/L5 5-pin Connect to external power and radio QZSS: L1CA/L2C/L5/L1C 7-pin NMEA output and data download L=BAND: ATLAS H10/H30/H50 SIM Card Micro SIM card Update rate 5 Hz, up to 20 Hz Cellular Global Version Performance (RMS)* Signal Reacquisition <1 sec		BeiDou:B1/B2/B3	Communication	
QZSS: L1CA/L2C/L5/L1C7-pinNMEA output and data downloadL=BAND: ATLAS H10/H30/H50SIM CardGlobal VersionUpdate rate5 H2, up b 2 HzCellularGlobal VersionPerformance (RMS)'SIM CardV2.1+EDR / V4.1 Dual Mode, Class 2Signal Reacquisition< 1 sec		GALILEO: E1BC/E5a/E5b	Memory	Internal 8 GB, expansion up to 32 GB
L-BAND: ATLAS H10/H30/H50 SIM Card Micro SIM card Update rate 5 Hz, up to 20 Hz Cellular Global Version Performance (RMS)' Cellular GSM/GPRS/EDGE/LTE/UMTS/WCDMA Signal Reacquisition <1 sec		SBAS: L1 CA/L5	5-pin	Connect to external power and radio
Update rate5 Hz, up to 20 HzCellularGlobal VersionPerformance (RHS)SM/GPRS/EDGE/LTE/UMTS/WCDMASignal Reacquisition< 1 sec		QZSS: L1CA/L2C/L5/L1C	7-pin	NMEA output and data download
Performance (RMS)¹ GSM/GPRS/EDGE/LTE/UMTS/WCDMA Signal Reacquisition < 1 sec		L-BAND: ATLAS H10/H30/H50	SIM Card	Micro SIM card
Signal Reacquisition<1 secBluetoothV2.1+EDR / V4.1 Dual Mode, Class 2Hot Start<10 sec	Update rate	5 Hz, up to 20 Hz	Cellular	Global Version
Hot Start < 10 sec	Performance (RN	IS) ¹		GSM/GPRS/EDGE/LTE/UMTS/WCDMA
Initialization Reliability > 99.9% WebUI Update firmware, manage settings and Static Accuracy Horizontal: 2.5 mm + 0.1 ppm Voice Support TTS voice broadcast RTK Accuracy Horizontal: 8 mm + 1 ppm MEMS Support, up to 60° Vertical: 15 mm + 1 ppm MEMS Support, up to 60° Vertical: 15 mm + 1 ppm MEMS Support, up to 60° Vertical: 0.25 m MEAO utput GGA, ZDA, GSA, GSV, GST, VTG, SBAS Accuracy Horizontal: 0.3 m Physical Specifications Power Supply Dual rechargeble and replaceable Weight 1.3 Kg with 2 batteries inside Ithium-ion batteries, 7.2 V - 3400 mAh * 2 Operating Temperature -40 C ~ +65 C Voltage 9-28 V DC, with over-voltage protection Operating Temperature -40 C ~ +80 C Vorking Time Up to 10 hours Storage Temperature -40 C ~ +80 C Charge Time Typically 4 hours Shock Survive a 2 m pole drop on concrete floor 1.2 m free drop 12 m free drop 12 m free drop Italicator Vibration resistant Up to 100% Life.tor	Signal Reacquisition	< 1 sec	Bluetooth	V2.1+EDR / V4.1 Dual Mode, Class 2
Static AccuracyHorizontal:2.5 mm + 0.1 ppmstatus, download dataVertical:3.5 mm + 0.4 ppmVoiceSupport TTS voice broadcastRTK AccuracyHorizontal:8 mm + 1 ppmMEMSSupport, up to 60°Vertical:15 mm + 1 ppmNMEA OutputGGA, ZDA, GSA, GSV, GST, VTG,Code DifferentialHorizontal:0.25 mRMC, GLLSBAS AccuracyHorizontal:0.3 mPhysical SpecificationsPower SupplyDimensionФ 156 mm x 76 mmBatteryDual rechargeble and replaceableWeight1.3 Kg with 2 batteries insideLithium-ion batteries, 7.2 V - 3400 mAh * 21.1 Kg without batteryVoltage9~28 V DC,with over-voltage protectionOperating Temperature-40 C ~ +65 CVorking TimeUp to 10 hoursStorage Temperature-40 C ~ +80 CCharge TimeTypically 4 hoursShockSurvive a 2 m pole drop on concrete floor1.2 m free dropVibrationVibration resistantHumidityUp to 100%LitmindityUp to 100%	Hot Start	< 10 sec	WIFI	802.11 b/g/n
Vertical: 3.5 mm + 0.4 ppm Voice Support TTS 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, Code Differential Horizontal: 0.25 m MEMS GGA, ZDA, GSA, GSV, GST, VTG, SBAS Accuracy Horizontal: 0.25 m MEMS GGA, ZDA, GSA, GSV, GST, VTG, SBAS Accuracy Horizontal: 0.3 m Physical Specifications Storage Tomposition Dual rechargebreature 30 C ~ +65 C 1.1 Kg without battery Voltage 9-28 V DC, with ver-voltage protection Operating Temperature -40 C ~ +80 C -40 C ~ +80 C Charge Time Typically 4 hours Kotek Shock Survive a 2 m pole drop on concrete flor Lindicator Vibration resistant<	Initialization Reliability	> 99.9%	WebUI	Update firmware, manage settings and
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, Code Differential Horizontal: 0.25 m MEMS RMC, GLL SBAS Accuracy Horizontal: 0.3 m Physical Specifications Power Supply Dimension Ф156 mm x 76 mm Battery Dual rechargeble and replaceable Weight 1.3 Kg with 2 batteries inside Lithium-ion batteries, 7.2 V - 3400 mAh * 2	Static Accuracy	Horizontal: 2.5 mm + 0.1 ppm		status, download data
Vertical: 15 mm + 1 ppm NMEA Output GGA, ZDA, GSA, GSV, GST, VTG, Code Differential Horizontal: 0.25 m RMC, GLL SBAS Accuracy Horizontal: 0.3 m Physical Specifications Power Supply Dual rechargeble and replaceable Uweight 1.3 Kg with 2 batteries inside Lithium-ion batteries, 7.2 V - 3400 mAh * 2 Verget 1.1 Kg without battery Voltage 9~28 V DC, with over-voltage protection Operating Temperature -30 C ~ +65 C Vorking Time Up to 10 hours Storage Temperature -40 C ~ +80 C Charge Time Typically 4 hours Water/ Dust Proof IP67 Charge Time Typically 4 hours Shock Survive a 2 m pole drop on concrete floor I Lithium-ion batteries, T.E V - Matteries Shock Survive a 2 m pole drop on concrete floor I Lithium-ion batteries Vibration Vibration resistant I Lithium-ion Vibration Vibration resistant I Lithium-ion Indicator Satellites, Datalink, Battery level, Bluetont		Vertical: 3.5 mm + 0.4 ppm	Voice	Support TTS voice broadcast
Code Differential Horizontal: 0.25 m RMC, GLL SBAS Accuracy Horizontal: 0.3 m Physical Specifications Power Supply Dimension Φ 156 mm x 76 mm Battery Dual rechargeble and replaceable Weight 1.3 Kg with 2 batteries inside Lithium-ion batteries, 7.2 V - 3400 mAh * 2 1.1 Kg without battery Voltage 9~28 V DC, with over-voltage protection Operating Temperature -30 C ~ +65 °C Working Time Up to 10 hours Storage Temperature -40 C ~ +80 °C Charge Time Typically 4 hours Water/ Dust Proof IP67 Shock Survive a 2 m pole drop on concrete floor 1.2 m free drop IL m free drop Vibration Vibration resistant Humidity Up to 100% Indicator Satellites, Datalink, Battery level, Bluetooth	RTK Accuracy	Horizontal: 8 mm + 1 ppm	MEMS	Support, up to 60°
SBAS Accuracy Horizontal: 0.3 m Physical Specifications Power Supply Dimension		Vertical: 15 mm + 1 ppm	NMEA Output	GGA, ZDA, GSA, GSV, GST, VTG,
Power SupplyDimensionΦ 156 mm x 76 mmBatteryDual rechargeble and replaceableWeight1.3 Kg with 2 batteries insideLithium-ion batteries, 7.2 V - 3400 mAh * 21.1 Kg without batteryVoltage9~28 V DC,with over-voltage protectionOperating Temperature-30 C ~ +65 CWorking TimeUp to 10 hoursStorage Temperature-40 C ~ +80 CCharge TimeTypically 4 hoursWater/ Dust ProofIP67Charge TimeFor August	Code Differential	Horizontal: 0.25 m		RMC, GLL
Battery Dual rechargeble and replaceable Weight 1.3 Kg with 2 batteries inside Lithium-ion batteries, 7.2 V - 3400 mAh * 2 1.1 Kg without battery Voltage 9~28 V DC, with over-voltage protection Operating Temperature -30 C ~ +65 C Working Time Up to 10 hours Storage Temperature -40 C ~ +80 C Charge Time Typically 4 hours Water/ Dust Proof IP67 Charge Time Shock Survive a 2 m pole drop on concrete floor 1.2 m free drop Vibration resistant Vibration resistant Imidity Up to 100% Indicator Satellites, Datalink, Battery level, Bluetooth	SBAS Accuracy	Horizontal: 0.3 m	Physical Specific	ations
Lithium-ion batteries, 7.2 V - 3400 mAh * 21.1 Kg without batteryVoltage9~28 V DC, with over-voltage protectionOperating Temperature-30 °C ~ +65 °CWorking TimeUp to 10 hoursStorage Temperature-40 °C ~ +80 °CCharge TimeTypically 4 hoursWater/ Dust ProofIP67Charge TimeShockSurvive a 2 m pole drop on concrete floor1.2 m free dropVibrationVibration resistantCharge TimeFundityUp to 100%Charge TimeIndicatorSatellites, Datalink, Battery level, Bluetooth	Power Supply		Dimension	Ф 156 mm x 76 mm
Voltage 9~28 V DC,with over-voltage protection Operating Temperature -30 C ~ +65 C Working Time Up to 10 hours Storage Temperature -40 C ~ +80 C Charge Time Typically 4 hours Water/ Dust Proof IP67 Charge Time Fock Survive a 2 m pole drop on concrete floor Image Time Image Temperature -1.2 m free drop Voltage Vibration Vibration resistant Image Time Image Temperature Satellites, Datalink, Battery level, Bluetooth	Battery	Dual rechargeble and replaceable	Weight	1.3 Kg with 2 batteries inside
Working TimeUp to 10 hoursStorage Temperature-40 °C ~ +80 °CCharge TimeTypically 4 hoursWater/ Dust ProofIP67Charge TimeShockSurvive a 2 m pole drop on concrete floorCharge Time1.2 m free dropCharge TimeVibrationCharge TimeVibrationCharge TimeUp to 100%Charge TimeIndicatorCharge TimeSatellites, Datalink, Battery level, Bluetooth		Lithium-ion batteries, 7.2 V - 3400 mAh * 2		1.1 Kg without battery
Charge Time Typically 4 hours Water/ Dust Proof IP67 Shock Survive a 2 m pole drop on concrete floor 1.2 m free drop Vibration Vibration resistant Humidity Up to 100% Indicator Satellites, Datalink, Battery level, Bluetooth	Voltage	9~28 V DC,with over-voltage protection	Operating Temperature	-30°C ~ +65°C
Shock Survive a 2 m pole drop on concrete floor 1.2 m free drop Vibration Vibration resistant Humidity Up to 100% Indicator Satellites, Datalink, Battery level, Bluetooth	Working Time	Up to 10 hours	Storage Temperature	-40°C ~ +80°C
Image: Constraint of the second of the se	Charge Time	Typically 4 hours	Water/ Dust Proof	IP67
Vibration Vibration resistant Humidity Up to 100% Indicator Satellites, Datalink, Battery level, Bluetooth			Shock	Survive a 2 m pole drop on concrete floor
Humidity Up to 100% Indicator Satellites, Datalink, Battery level, Bluetooth				1.2 m free drop
Indicator Satellites, Datalink, Battery level, Bluetooth			Vibration	Vibration resistant
			Humidity	Up to 100%
Certificate CE, FCC, IP67			Indicator	Satellites, Datalink, Battery level, Bluetooth
			Certificate	CE, FCC, IP67

Illustrations and technical specifications are subject to change without notice.

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



Shanghai e-Compass Science & Technology Co., Ltd Building 4, No. 651 Wanfang Rd, Minhang District, Shanghai 201112, China Tel: +86 21 54467215 Email: info@esurvey-gnss.com Web: www.esurvey-gnss.com Edition: 20191219