

eRTK60

FULL-FEATURED VISUAL GNSS RECEIVER

The eSurvey new eRTK60 GNSS receiver integrates high performance GNSS, IMU and dual-camera technologies to provide more reliable and diverse measurement results. Visual survey technology enables you to measure the point without physically reaching it, thereby giving you more flexibility in the field and maximizing productivity in your projects. The upgraded built-in radio supports longer communication distances. The extended working endurance of the eRTK60 is guaranteed by its hot-swap batteries. Its colorful LED screen also offers a more intuitive working status and operation interface.



GNSS Receiver

Visual Survey: Measuring What You See

Visual survey technology provides accurate positioning coordinates from images captured in seconds. Measure what you see, get the coordinates of previously unreachable and signal-blocked points.

Colorful LED Display

View the primary status and basic information, set the work mode, and operate the device, allowing for more convenient and direct interactive actions.

CAD AR Stakeout: Improved Efficiency

CAD drawings are directly marked on the interface, thus there is no need to choose each point individually. The CAD AR stakeout is a highly effective tool for optimizing stakeout operations and simplifying complex construction tasks in a variety of construction scenarios.

Advanced Long-Range Tx/Rx UHF Modem

Integrated with the long range UHF modem, the eRTK60 is compatible with traditional major radio protocols. The maximum communication distance can reach 10 km with 1W transmit power in urban environments.

Hot-swappable Batteries: Providing Uninterrupted Service

Designed with a symmetric battery compartment and driven by sufficient charged batteries on hand, the hot-swap battery power system of the eRTK60 is meant to improve power availability while eliminating power-related downtime.

Detailed SBF Data Recorded: Advanced Analysis for The Receiver

Support SBF data output. This data should be your first choice if you wish to receive complete and detailed information from the receiver for advanced analysis.



Product Specification

eRTK60



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GNSS Performance		
Satellites tracking	GPS	L1 C/A, L1PY, L2C, L2P, L5
	BDS	B1I, B1C, B2a, B2b, B2I, B3
	GLONASS	L1 C/A, L2 C/A, L2P, L3 CDMA
	Galileo	E1, E5a, E5b, E5 AltBoc, E6
	QZSS	L1 C/A, L1 C/B, L2C, L5
	NavIC	L5
	SBAS	WAAS, GAGAN, MSAS, EGNOS, SDCM(L1 L5)
Channels	448	
Signal reacquisition	< 1 second	
Cold start	< 45 seconds	
Warm start	< 20 seconds	
Hot start	< 20 seconds	
RTK signal initialization	< 7 seconds	
Initialization reliability	> 99.9%	
Update rate	20Hz	
RTK	<ul style="list-style-type: none"> H: 6 mm + 0.5 ppm (RMS) V: 10 mm + 1 ppm (RMS) 	
Standard point positioning	<ul style="list-style-type: none"> H: 1.2 m (RMS) V: 1.9 m (RMS) 	
Code differential	<ul style="list-style-type: none"> H: 0.4 m (RMS) V: 0.7 m (RMS) 	
SBAS	<ul style="list-style-type: none"> H: 0.6 m (RMS) V: 0.8 m (RMS) 	
Correction data	CMR, CMR+ (input only), RTCM v2.x, RTCM v3.x	
Data output	GGA, ZDA, GSA, GSV, GST, VTG, RMC, GLL, Binary, SBF	

Power Supply	
Battery	Removable and rechargeable Hot-swappable Lithium-ion battery x 2 7.2 V ~ 3400 mAh x2
Voltage	5-pin: 9 - 28V DC 2A, 15V/2A (DC Rated) Type-C: PD 12V/1.5A
Working time	10 hours as UHF base with 2W transmitting

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

I: It varies with the obstacle, terrain and protocols.

System	
Operation system	Linux
Internal memory	8 GB
Bluetooth	BT5.0+EDR, BLE
Wi-Fi	802.11a/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	Data transmission
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 × H74.5 mm
Weight	931 g
Operating temperature	-30°C ~ +65°C
Storage temperature	-40°C ~ +80°C
Water / dust proof	IP67
Shock	<ul style="list-style-type: none"> 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
Button	Power button, function button
Screen	1.1" colorful screen
Certificate	CE, FCC, NGS, IGS

Internal Radio	
Type	TX and RX
Emitting power	1W/2W
Operation range	3-5 km typically up to 15 km with optimal conditions ¹
Frequency range	410 - 470 MHz
Channel spacing	12.5 kHz / 25 kHz
Protocol	eLink_Ultra, geotalk_Ultra, FARLINK, TRIMTALK, TRIMMK III, SOUTH, TRANSEOT, GEOTALK, GEOMK3, SATEL, HITARGET, HZSZ, PCCEOT, PCCEOT_SATEL, PCCFST, PCCFST_AD, SATEL_AD

Visual Configuration	
Visual stakeout	
Pixel	2 MP
Frame Rate	30 FPS
FOV	72°

Visual Configuration	
Visual survey	
Pixel	2 MP
FOV	88°
Image accuracy	2-4 cm, range 2-15 m



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