

APH

Survey Instruments

Precision • Performance • Perfection



SBASE

GNSS RTK RECEIVER

SURVEY WITH CONFIDENCE

Reliable Positioning.
Superior Accuracy.
Maximum Productivity.

Designed for surveyors, engineers, GIS professionals, and construction teams who require accurate positioning and dependable field performance.



KEY FEATURES

-  Multi-Constellation GNSS Tracking
-  5W Long-Range Radio Communication
-  IMU Tilt Compensation up to 120°
-  Fast RTK Initialization (<5 Seconds)
-  Up to 36 Hours Battery Life
-  IP67 Waterproof & Dustproof Design
-  4G LTE, Wi-Fi, Bluetooth & NFC
-  Centimeter-Level Positioning Accuracy

APPLICATIONS



Land Surveying



Construction Layout



Road & Highway Projects



GIS Mapping



Utility Survey



Agriculture & Infrastructure Development

Why Choose This?



- ✓ High-Precision Positioning
- ✓ Fast RTK Initialization
- ✓ Advanced IMU Tilt Survey
- ✓ Reliable Communication
- ✓ Extended Battery Life
- ✓ IP67 Dust & Water Protection

Specifications

	SPECIFICATION	DETAILS
 GNSS PERFORMANCE	Channels	1408
	Satellite Systems	GPS: L1C/A, L2P(Y), L2C, L5 GLONASS: L1, L2 BDS: B1I, B2I, B3I, B1C, B2a, B2b Galileo: E1, E5a, E5b, E6 QZSS: L1, L2, L5, L6 SBAS: L1
	Positioning Rate	Up to 50Hz
	Operating System	Linux
	Initialization Time	< 5 Seconds (Typical)
	Initialization Reliability	99.99%
 POSITIONING PERFORMANCE	Static Horizontal Accuracy	± (2.5mm + 0.5×10 ⁻⁶ × D)
	Static Vertical Accuracy	± (5mm + 0.5×10 ⁻⁶ × D)
	RTK Horizontal Accuracy	± (8mm + 1.0×10 ⁻⁶ × D)
	RTK Vertical Accuracy	± (15mm + 1.0×10 ⁻⁶ × D)
 IMU SENSOR	IMU	Supported
	Accuracy	< 2cm (within 60°)
 DATA OUTPUT	Tilt Angle	0° ~ 120°
	Correction Data	RTCM2.x, RTCM3.x
	GPS Data	NMEA 0183, RINEX, Binary
	Tilt Survey	Supported
 DISPLAY & STORAGE	PPK Survey	Supported
	Buzzer	Supported
	NFC	Supported
	Display	1.39 inch LCD
 BATTERY & POWER	Internal Storage	32GB
	Static Data Format	TXT
	Battery Capacity	7.2V, 13200mAh
	Rover Working Time	Up to 36 Hours (CORS Mode)
 HARDWARE	Base Working Time	Up to 14 Hours (Base Mode)
	External Power	USB Type-C (Power Bank Supported)
	Weight	1.30 kg
	Dimensions	151 × 151 × 101 mm
	Operating Temperature	-45°C ~ +75°C
	Storage Temperature	-55°C ~ +85°C
	Water / Dust Proof	IP67
	Shock Resistance	IK08
 COMMUNICATION	Drop Resistance	Survive 1.8m Drop
	Wireless Communication	Bluetooth, WiFi, 4G LTE, NFC
	Web Interface	Built-in Web UI
	Radio Transmission Power	5 W
 RADIO	Long Range Radio (LoRa)	Supported
	Internal Radio Frequency	410~470 MHz
	Protocol	TRIMTALK450S, TRIMMARKIII, SOUTH9600, SOUTH19200, LoRa
 INTERFACES	I/O Ports	1 × USB Type-C (Power Supply & Charge) 1 × NFC Radio Antenna Port 1 × Nano SIM Card Slot 1 × Power Key
	Protection	IP67 Waterproof & Dustproof
 OTHER	Certification	CE / FCC / RoHS
	Accessories (Standard)	Antenna, USB Cable, Charger, Carry Case, Pole Clamp, User Manual



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☎ 7888863030

✉ aphisurveyinstruments@gmail.com

🌐 aphisurveyinstruments.com