



Next-gen GNSS technology combining AR and long battery life for ultimate precision.



# GBO GNSS RECEIVER

The G30Pro GNSS Receiver is designed to push the boundaries of geospatial technology with its cutting edge features. This long-lasting receiver integrates advanced Augmented Reality (AR) technology and Image Survey (IS), providing high-definition real-time plotting capabilities for the most accurate and convenient layout tasks. Powered by a high-precision IMU module, the G30Pro offers seamless tilt measurement for flawless RTK surveys.



Whether it's precision surveying, AR stakeouts, or imagebased measurements, the G30Pro delivers exceptional accuracy and efficiency, making it a trusted companion for any geospatial professional.

### CHARACTERISTIC

### **Linux Intelligent System**

Linux+ARM Cortex-A7 intelligent system platform offers efficient computation and unlimited product functionality expansion.

### **AR Real-Time Stakeout**

Utilizes a professional ultra-wide-angle camera to provide high-definition real-time plotting functionality, making layout tasks more accurate and convenient.

## **Full System GNSS Reception**

The receiver integrates a high-precision positioning module with 1408 high-speed channels. It supports BDS B11/I321/B31/B1C/B2a/B2b(PPP), GPS L1/L2/L5, GLONASS L1/L2/L3, Galileo E1/E5a/E5b/E6(PPP), QZSS L1/L2/L5 signals reception and calculation.



#### Tilt Measurement

Built-in intelligent high-precision inertial navigation module for real-time tilt compensation, eliminating "fly points" in RTK measurement.

### 4G Full NetCom

The 4G NetCom solution based on the Linux platform fully supports 2/3/4G networks of China Mobile China Unicom/China Telecom, offering better compatibility, stronger signals, and more stable connections.

## **Long Endurance**

Built in high-capacity lithium battery ensures continuous working time of more than 16 hours under normal operation.



## **Image Survey**

Equipped with a 1/2.6-inch large base high-definition wideangle camera, it integrates high-precision inertial navigation algorithms and works with high-performance Android handheld devices for high-precision image measurement.





#### ITEM

#### **SPECIFICATION**

REMARKS

#### HARDWARE SYSTEM

#### ARM Cortex-A7 1.8GHz

os		LINUX	
	GPS	L1 C/A, L1C, L2P(Y), L2C, L5	
	GLONASS	L1, L2, L3	
	BDS	B1I, B2I, B3I, B1C, B2a, B2b	PPP-B2b, PPP-E6, SBA
	GALILEO	E1, E5a, E5b, E6	supported
	QZSS	L1, L2, L5	
GNSS	SBAS	L1	
	NavIC (IRNSS)'	L5	IRNSS supported
	Channel	1408	
	Standard Output	NMEA-0183	
	Correction I/O Protocol	RTCM 3.X	
	Frequency	20Hz	
	Reacquisition Time	<]s	
	Cold Start Time	<40s	
	Single (RMS)	Horizontal: 1.5m Vertical: 2.5m	
ACCURACY	DGPS(RMS)	Horizontal: 0.4m Vertical: 0.8m	
	RTK(RMS)	Horizontal: ±(8mm+1ppm) Vertical: ±(15mnn+1ppm)	
	Time Precision (RMS)	2Ons	
	Static Mode Precision (RMS)	Horizontal: ±(2.5mm+0.5ppm) Vertical: ±(5mm+0.5ppm	
	Velocity Estimation (RMS)	0.03m/s	
	Tilt Correction(within 60°)	≤2cm	
	Bluetooth	BR+EDR+BLE	
	WIFI	802.11 b/g/n	
SYSTEM PLATFORM	Network	LTE FDD: B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28 LTE TDD: B38/39/40/41 WCDMA: B1/2/4/5/6/8/19 GSM: B2/3/5/8	
	Radio	Integrated receiver/transmitter Frequency Range:410-470MHz Power: 5W(37±1dBm) 1W(30±1dBm) Protocols: TRIMTALK, TRIMMK3, SOUTH, TRANSEOT Air Baud Rate: 9600, 19200	
	Storage	32GB Storage	
	IS Camera	Supports image survey Sensor size: 1/2.6 inch Focal length: 3.27mm Aperture: f/2.8 Resolution: 1920*1080 Field of view: 83x72x51° Distortion: <0.5%	



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INDICATOR	Power Indicator	Indicates power and charging status	
	Differential Signal Indicator	Indicates differential signal transmission status	
	Satellite Indicator	Indicates satellite reception status	
	Bluetooth Indicator	Indicates Bluetooth connection status	
BATTERY/CHARGE	Capacity	7.2V, 13800mAh	
	Endurance	Over 48 hours (when applying controller network mode)	
	Charging	Supports USB PD 15V/2A and 5V/3A	With adaptive dynamic current adjustment
ENVIRONMENT	Operating Temperature	-20°C ~ +60°C	
	Storage Temperature	-40°C ~ +85°C	
	Shock Resistance	Can with stand 1.5M pole drop normal temperatures	
	Protection Rating	I P68	
PHYSICAL	Material	Magnesium alloy main body, ABS/PC plastic top cover	
	Dimension	174.9mm* 104.9mm	
	Weight	≤1.5kg	
ACCESSORIES	G30 Device	1 SET	
	Power adapter	1 PCS	
	Type-C To Type-C	1 PCS	
	Radio Antenna	1 PCS	
	7-Pin Data Cable	1 PCS	

Manufacturers may update parameters at any time, please refer to the latest product information.



