T30Pro GNSS Receiver

The T30Pro is a GNSS receiver with a long battery life integrates AR and image surveying (IS). It has a built-in high-precision positioning module that supports tracking all of the satellite signals. It is equipped with 4G Full Netcom, Bluetooth, Wi-Fi, a 5W data transmission radio. With a 7.2V, 13800mAh battery, it supports two days of operation after a single charge. The receiver also features a high-precision IMU module, IS, and AR stakeout, further expanding the boundaries of RTK survey.



HEIGHT DIAMETER WEIGHT 104.9 mm 174.9 mm

CHARACTERISTIC



Linux Smart System

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

Full System GNSS Reception

The receiver integrates a high-precision positioning module with 1408 high-speed channels. It supports BDS B1I/B2I/B3I/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

T30Pro has the IMU module. Fast initialization and up to 60° inclination.



Image Surveying

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

AR

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.

4G

4G Full NetCom

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

TECHNICAL PARAMETERS

	ITEM	SPECIFICATION	REMARKS
HARDWARE SYSTEM		ARM Cortex-A7 1.8GHz	
	os	Linux	
GNSS	GPS	L1 C/A, L1C, L2P(Y), L2C, L5	
	GLONASS	L1, L2, L3	PPP-B2b, PPP-E6 SBAS supported
	BDS	B1I, B2I, B3I, B1C, B2a, B2b	
	GALILEO	E1, E5a, E5b, E6	
	QZSS	L1, L2, L5	
	SBAS	L1	
	NavIC (IRNSS)*	L5*	Requires firmware sup
	Channel	1408	
	Standard Output	NMEA-0183	
	Correction I/O Protocol	RTCM 3.X	
	Frequency	20Hz(max)	
	Reacquisition Time	<1s	
	Cold Start Time	<40s	
ACCURACY	SINGLE (RMS)	Horizontal: 1.5m ; Vertical: 2.5m	
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	DGPS (RMS)	Horizontal: 0.4m; Vertical: 0.8m	
	RTK (RMS)	Horizontal: ±(8mm+1ppm) Vertical: ±(15mm+1ppm)	
	Timing Precision (RMS)	20ns	
	Static Mode Precision (RMS)	Horizontal: ±(2.5mm+1ppm) Vertical: ±(5mm+1ppm)	
	Velocity Estimation (RMS)	0.03m/s	
	Tilt Correction (Within 60°)	<2cm	
SYSTEM PLATFORM	Bluetooth	BR+EDR+BLE	
	WIFI	802.11 b/g/n	
	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: 1W/2W/5W	
		Protocols: TRIMTALK, TRIMMK3, SOUTH, TRANSEOT	
		Air Baud Rate: 9600, 1920 0bps	
	Storage	32GB storage	
	IS Camera	Supports image survey	
		Sensor size: 1/2.6 inch Focal length: 6 mm	
		Aperture: f/2.8 Resolution: 1920*1080	
		Field of view: D51.8°H42.4°V32.4° Distortion: < 0.5%	
	AR Camera	Supports AR real scene stakeout Sensor size: 1/2.8 inch Aperture: f/2.5	
		Sensor size: 1/2.8 inch Aperture: f/2.5 Resolution: 1920*1080 Distortion: <0.38%	
		Field of view: D70.3°H62.7°V38.6°	
	Power Indicator		
INDICATOR		Indicates power and charging status	
	Differential Signal Indicator	Indicates differential signal transmission status	
	Satellite Indicator	Indicates satellite reception status	
BATTERY/CHARGE	Bluetooth Indicator	Indicates Bluetooth connection status	
	Capacity	7.2V, 13800mAh	
	Endurance	Over 48 hours(when applying controller network mode)	
	Charging	Supports USB PD 15V/2A and 5V/3A	With adaptive dyna current adjustment
ENVIRONMENT	Operating Temperature	-20℃~+60℃	
	Storage Temperature	-40℃~+85℃	
	Shock Resistance	Can withstand a 1.5m drop at normal temperatures	
	Protection Rating	IP68	
PHYSICAL	Materials	Magnesium alloy casing with ABS/PC plastic top cover	
	Dimensions	Φ174.9 * 104.9mm	
	Weight	1500g	

 Equipped with electronic fence system, Toknav's product have area code restrictions. Any issue please contact Toknav or local dealers to verify the specific details.











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