TOKNAV

Guangzhou Toksurvey Information Technology Co.,Ltd
www.toknav.cn | info@toknav.cn

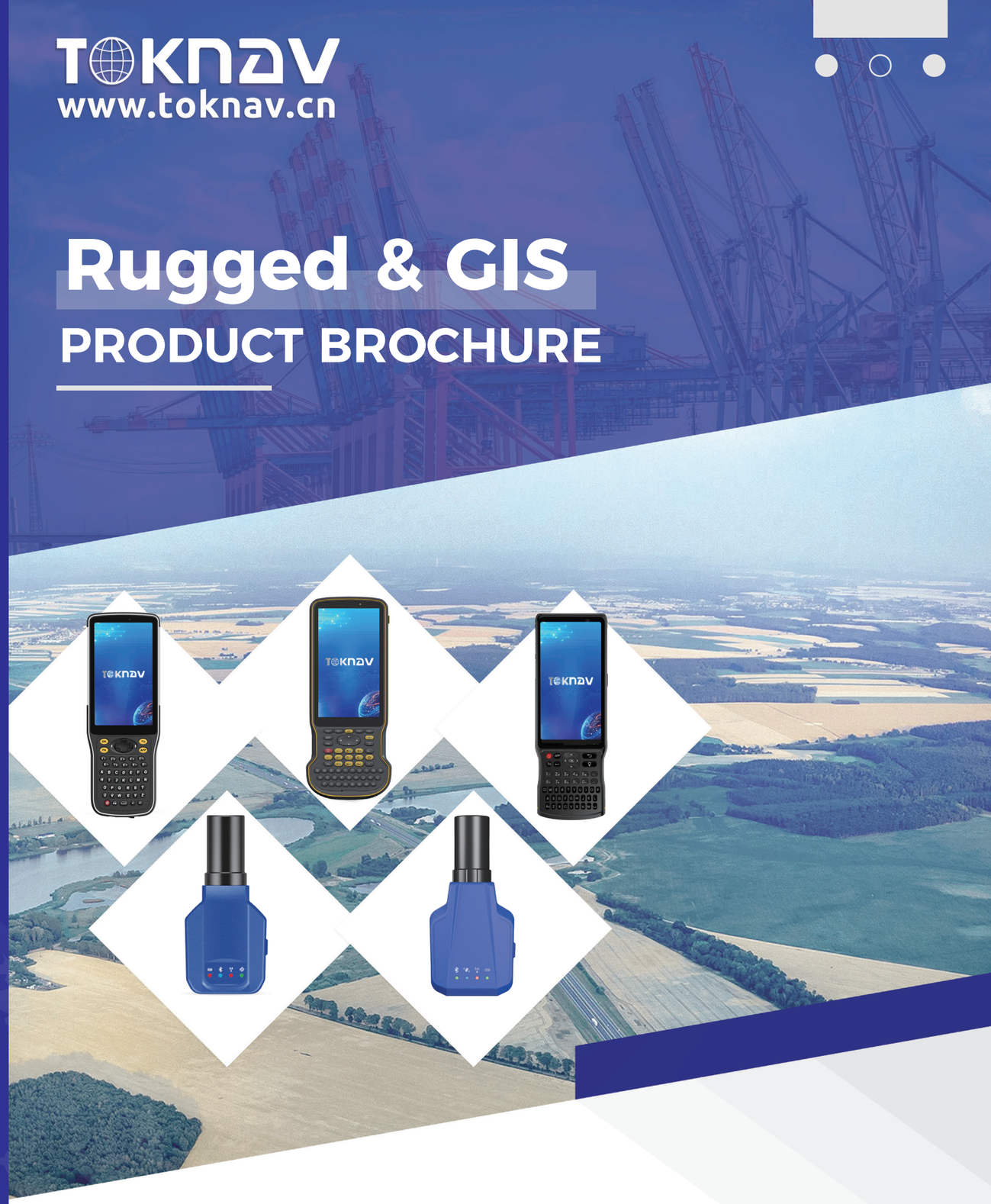
Europe, North and South America
Tel and WhatsApp:
+1 (323) 847-7713 (lan)

Asia, Africa and Oceania
Tel and WhatsApp:
+86 139 2607 5986 (Jeffrey)

No. 9 Caipin Road，Building B, Room 902-3, Huangpu District,
Guangzhou, China 510000

TOKNAV
www.toknav.cn

Rugged & GIS
PRODUCT BROCHURE



- GNSS Receiver Manufacturer
- Professional OEM&ODM
- Over 15 years experience in R&D and manufacturing

ABOUT US

Company Introduction

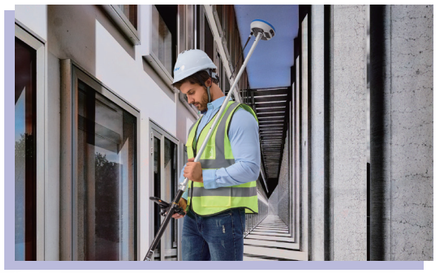
Guangzhou Toksurvey Information Technology Co., Ltd. was founded in 2019 by a team of R&D engineers. The company team has nearly 15 years of R&D background. At present, the company has nearly 2,500 square meters of office and factory, complete set of research equipment, and strong technical background.





Our company is committed to the R&D, production and sales of high-precision satellite positioning terminal products. More than 60% of the employees are engineers. Driven by technological innovation, the company maintains a steady growth rate of 60% every year.

At present, the company has successfully launched high-precision GNSS RTK (T5 series, T10 series, T20 series and T30 series), portable RTK receiver (P8 series), high-precision CORS station (NET660 series), data controller, GNSS antenna, and pre-marking robot to the market. We not only provide positioning products, but also provide a series of application solutions.





Our Targets

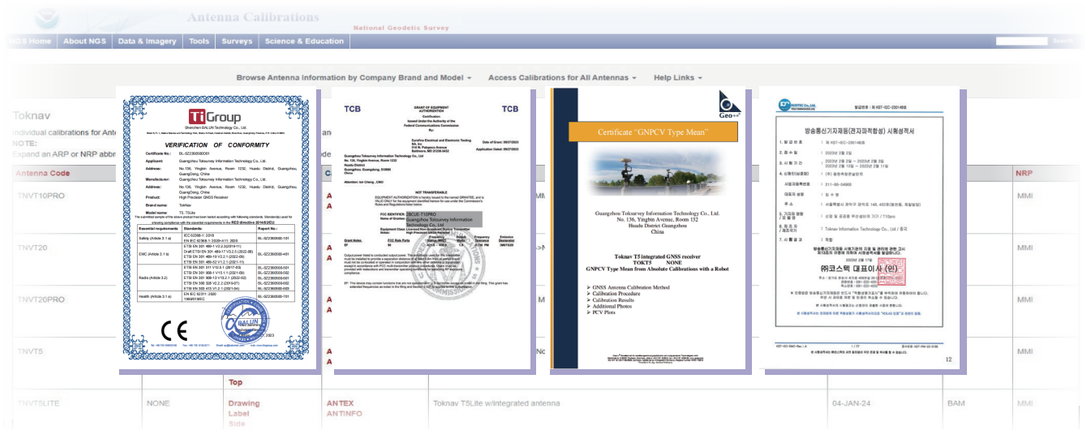
Mission	Vision	Value	Slogan
Make positioning more precise and easier.	Working together to improve global surveying quality.	To become a leader in the global surveying and mapping service.	Your reliable supplier in positioning!

Fields of Application

TOKNAV products can be widely used in precision surveying & mapping, mining operations, deformation monitoring, autonomous driving and other fields. We currently have a number of mature GNSS application solutions, such as deformation monitoring, CORS network, pre-marking robots, etc. TOKNAV products have passed CE, FCC, KC, NGS, IGS and other certifications, and are exported to more than 70 countries and regions around the world. Our products are well received in the global market, and now we have become a system integration supplier in the global market.

- Construction
- Monitoring
- Mapping & GIS
- Surveying
- Agriculture
- Marine

Certifications



CONTENT



Products

Rugged & GIS Line Overview 1

Data Controller

PCR100T Data Controller 5

PCR300 Data Controller 7

PCR500 Data Controller 9

Portable RTK Receiver

P8/P8Pro Portable RTK Receiver 11

P8Glo Portable RTK Receiver 13

Rugged & GIS Line Overview

PRODUCTS		PCR100T	PCR300	PCR500
ITEM				
SYSTEM	Operating system	Android 11	Android 9.0	Android 12
	CPU	8-core 2.0GHz processor	MT6762-8core 2.0 GHz	Qualcomm SM6115
	Memory	4GB RAM + 64GB ROM	3GB RAM + 32GB ROM	4GB RAM + 64GB ROM
	External storage	Micro SD, up to 512GB	Micro SD, up to 128GB	Micro SD
INPUT/OUTPUT	Display	720*1440p	720*1280p	1080*1920p
	Touch Panel	5-point capacitive touch	10-point capacitive touch	Multi-touch, support glove and wet hands operation
	Camera	13MP rear, Support Flash light		Rear 13MP, AF with double white LED Flash
	Sensors	Ambient Light Sensor and Accelerometer	G-Sensor, Compass, Light-Sensor, Gyro	Gyroscope, Accelerometer, Ambient Light and eCompass Sensor
	Interface	Option1: 1*Nano Sim+1*Micro SD Option2: 2*Nano Sim	Nano SIM *2, USB2.0 Type-C*1, Support OTG and headphone	Type-C (USB3.0 Supports OTG) SIM: one Nano SIM card slot Indicator LED
DATA COMMUNICATION	GNSS	GPS+BDS+GNSS+GLONASS+AGPS	GPS+GLONASS+BDS	Qualcomm GPS/A-GPS, GLONASS, BDS, Galileo
	WIFI	IEEE 802.11 a/b/g/n/ac Dual-band: 2.4G/5G		
	Bluetooth	BT5.0 (BLE)	BT4.1 (BLE)	BT5.0 (BLE)
	NFC	support	not support	support
ELECTRICAL	Battery	9000mAh (Support Rapid Charging) Working time: 18h Charging time: ⩽5 hours	5200mAh 3.8V Working time: 12 hours Charging time: ⩽4 hours	9000mAh (Support Rapid Charging) Working time: 22 hours Charging time: Reaching 90% ⩽4 hours
PHYSICAL	Dimension	221mm*78mm*16.5mm	225mm*78mm*14.5mm	227.8mm*95.8mm*20.9mm
	Weight	410.6g	350g	420g
ENVIRONMENTAL	Temperature	Work Temperature: -20°C~+55°C Storage Temperature: -40°C~+70°C	-20°C~+60°C -40°C~+70°C	-20°C~+65°C -30°C~+70°C
	Work Humidity	5%~95%	0 -95% RH, non-condensing	/
	Protection	IP68	IP67	IP68
	Shock	1.5M		1.2M

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

Rugged & GIS Line Overview

PRODUCTS		P8	P8Pro	P8Global
ITEM				
HARDWARE SYSTEM		ESP32 + ASR ARM		ARM Cortex-A7 1.8GHz
OS		FreeRTOS		Linux
GNSS	GPS	L1C/A, L2C, L2P(Y), L5		L1C/A, L1C, L2C, L2P(Y), L5
	GLONASS	G1, G2		G1, G2, G3
	BDS	B1I,B2I,B3I,B1C,B2a		B1I, B2I, B3I, B1C, B2a, B2b
	GALILEO	E1, E5a, E5b		E1, E5a, E5b, E6
	QZSS	L1C/A, L2C, L5		L1C/A, L1C, L2C, L5
	SBAS	L1C/A		
	NavIC(IRNSS)	\		L5(Require specialized firmware)
	Channel	1408		
	Data Format	NMEA-0183		
	Correction I / O Protocol	RTCM3.X		
	Data Update Frequency	5Hz		
POSITIONING ACCURACY	Single (RMS)	Horizontal: 1.5m		
	RTK (RMS)	Horizontal: 0.8cm+1ppm Vertical: 1.5cm+1ppm		
	Tilt compensation Accuracy(within 60°)	not support	⩽2cm	
SYSTEM	Network	Multi-network Compatible LTE FDD: B1, B3, B5, B8 LTE TDD: B34, B38, B39, B40, B41		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
	Bluetooth	BR+EDR		
PHYSICAL	Dimension	53.8mm*37mm*117.5mm		60mm*41.3mm*126.3mm
	Weight	P8: 141g/P8Pro: 143g		176g
ELECTRICAL	Battery	7.4V 1800mAh		7.4V 2500mAh
	Work Time	More than 8 hours		More than 12 hours
ENVIRONMENTAL	Temperature	Operating Temperature: -20°C~+60°C Storage Temperature: -40°C~+85°C		
	Protection	IP67		

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

PCR100T Data Controller

The PCR100T is a flagship RTK measurement control terminal designed specifically for the surveying industry. It boasts an impressive battery life of over 18 hours, a 5.45-inches sunlight-readable screen for easy outdoor viewing, and operates on the Android 11 system for smooth performance. It features a digital keyboard and offers IP68-level protection against the elements. With professional surveying software, it empowers users to effortlessly tackle various surveying scenarios.



WIDTH 78mm | THICKNESS 16.5mm | WEIGHT 410.6g



CHARACTERISTIC

Powerful System

Equipped with an Android 11 operating system, an 8-core 2.0GHz processor, 4GB of RAM with 64GB of storage, configure 13MP rear camera.

Display Excellence

The device boasts a 5.45-inch display, with a resolution of 720*1440px. It offers a seamless touch experience with support for up to 5-point capacitive touch. What's more, it enables effortless operation even with gloved or wet hands.

Smooth Operation

The device features an ergonomic design that provides a comfortable grip and an exceptional user experience during operation.

Various Data Communication Methods

The PCR100T Data Controller supports multiple communication methods such as Wi-Fi, Bluetooth, NFC and 4G, which satisfies the needs of users in most regions of the world.

Long Endurance

Built-in high-capacity lithium battery ensures continuous working time of more than 18 hours under normal operation.

Robust Device Protection

The device is designed to withstand harsh environments and is tested to meet IP68 waterproof and dustproof standards. It is also built to withstand drops from a height of 1.5 meters, ensuring durability and reliability in challenging conditions.

TECHNICAL PARAMETERS

ITEM		SPECIFICATION
SYSTEM	OS	Android 11
	CPU	8-core 2.0GHz processor
	Memory	4GB RAM + 64GB ROM
	External storage	Micro SD, up to 512GB
PHYSICAL PARAMETERS	Display	Screen size : 5.45 inch Resolution: 720*1440p
	Touch Panel	5-point capacitive touch
	Button	Standard English full keypad
	Camera	Rear 13MP, Support Flash light
	Sensors	Ambient Light Sensor and Accelerometer
	Notification	Audio, Vibration, and LED Indicators
	Interface	Option1: 1*Nano Sim+1*Micro SD Option2: 2*Nano Sim
DATA COMMUNICATION	GNSS	GPS+BDS+GNSS+GLONASS+AGPS
	WIFI	IEEE 802.11 a/b/g/n/ac Dual-band: 2.4G/5G
	Network	FDD -LTE B1/B2/B3/B4/B5/B7/B8/B12/B17/B20/B28/ TDD -LTE B34/B38/B39/B40/B41 WCDMA B1/B2/B5/B8 GSM B2/B3/B5/B8 TD-SCDMA：B34/39
	Bluetooth	BT5.0 (BLE)
	NFC	Supported
ELECTRICAL	Battery (non-removable)	9000mAh (Support Rapid Charging) Working time: 18h Charging time: ≤5 hours
PHYSICAL	Dimension	221mm*78mm*16.5mm
	Weight	410.6g
ENVIRONMENTAL	Temperature	Work Temperature: -20°C~+55°C Storage Temperature: -40°C~+70°C
	Humidity	5%~95%
	Protection	IP68
	Shock	Withstand 1.5M pole drop
	ESD	Air discharge: ±15kV Contact discharge: ±8kV

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

PCR300 Data Controller

With IP67 certification, PCR300 Data Controller is designed for someone who works in harsh environments. With its ergonomic design, PCR300 offers easy one-handed use and provides extended flexibility during fieldwork. Featuring an MTK Octa-core 2.0G processor, it provides user with a smooth using experience. PCR300 is suitable for different kinds of outdoor applications such as surveys and GIS.



WIDTH	THICKNESS	WEIGHT
78mm	14.5mm	350g



CHARACTERISTIC

Fresh Vision and Light Weight

Enjoy a slim profile and sleek look, so that users can easily carry it in various complex environments, benefitting from its lightweight and compact design.

Rugged Design

PCR300 Data Controller is IP67 certificated rugged device. It survives a 1.5m drop on a concrete floor.

Impressive Battery Life

Continuously work up to 12 hours in remote areas with limited access to electricity and no longer need to worry about a whole day's work, with its 5200mAh rechargeable and replaceable lithium-ion battery, which makes your data save safely.

Dual SIM Cards with 4G Network

PCR300 Data Controller supports dual Nano SIM cards with 4G network. You can use it for daily work anywhere.

Digital Keypad

It can work smoothly bare-handed or with gloves in rustic climatic conditions. PCR300 Data Controller has a digital keypad supporting a stylus pen and a physical alphanumeric keypad.

Powerful System

Equipped with an 8-core 2.0GHz processor and Android 9.0 system, PCR300 Data Collector brings smooth working experience.

TECHNICAL PARAMETERS

ITEM		SPECIFICATION
SYSTEM	OS	Android 9.0
	CPU	MT6762-8-core 2.0 GHz
	Memory	3GB RAM + 32GB ROM
	External storage	Micro SD, up to 128GB
PHYSICAL PARAMETERS	Display	Screen size: 5-inch Resolution: 720*1280px Density: 320ppi Brightness :400nits
	Touch panel	10-point capacitive touch
	Camera	Rear 13MP, Support Flash light, Support Auto focus
	Sensors	G-Sensor, Accelerometer , Light-Sensor, Gyro
	Buttons	Battery* 1 Arrow* 4 Return* 1 Confirm* 1 APP quick button* 1 Backspace* 1 FN* 1 Caps lock* 1 Dot* 1 Space key* 1 0~9* 10 A~Z* 26
DATA COMMUNICATION	GNSS	Tracking: GPS/BDS/GLONASS Accuracy: Single: 1-3m
	WIFI	802.11 a/b/g/n/ac Dual-band: 2.4G & 5G
	Bluetooth	BT4.1 BLE
	Network	GSM: B2/B3/B5/B8 FDD-LTE: B1/B2/B3/B4/B5/B7/B8/B12/B13/B17/B20/B25/B28 TDD-LTE B38/B39/B40/B41 TDSCDMA B34/B39 WCDMA B1/B2/B5/B8 CDMA1x/CDMA2000 BC0
	Interface	Nano SIM * 2 USB2.0 Type-C*1, Support OTG and headphone
ELECTRICAL	Battery (replaceable)	5200mAh 3.8 V Working time: 12 hours Charging time: ⩽4 hours
PHYSICAL	Dimension	225mm*78mm*14.5mm
	Weight	350g
ENVIRONMENTAL	Temperature	Operating temperature: -20℃ ~+55℃ Storage temperature: -40℃ ~+70℃
	Work Humidity	5% -95% RH, non-condensing
	Protection	IP67
	Shock	Survive a 1.5m drop on concrete floor
	ESD	Air discharge: ±12kV Contact discharge: ±8kV
CERTIFICATE	Regulatory Compliance	CCC

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

PCR500 Data Controller

PCR500 is Toknav brand-new Android 12 data controller featuring the latest industrial-grade processor from Qualcomm. With its slim form factor and an innovative English keypad, it is designed for complex mobile office scenarios. Besides, the 5.5-inch 1080P display utilizes Gorilla Glass, enhancing durability while ensuring excellent readability in sunlight so as to enhance outdoor data collection visibility.



WIDTH 95.8mm | THICKNESS 20.9mm | WEIGHT 420g



CHARACTERISTIC

Powerful System

PCR500 is equipped with the Qualcomm SM6115 processor, designed with an 11nm fabrication process, providing powerful performance for smooth CAD drawing management and base map display, greatly enhancing productivity.

Display Excellence

With its slim form factor and an innovative English keypad, it's specifically designed for field measurements and mapping operations. The 5.5-inch 1080P resolution industrial display with 500 nits brightness enhances outdoor data collection visibility even in sunlight.

Standard English Full Keypad

The brand-new British-style keypad design has been optimized, allowing for fast data input without changing user's habits. Moreover, without increasing the device's size, we've thoughtfully reserved multiple shortcut buttons to assist user in swiftly completing various operations in industry applications. The large-capacity battery design ensures uninterrupted data collection tasks, making PCR500 an efficient handheld terminal for measurement and mapping applications.

Various Data Communication Methods

PCR500 provides various connectivity options, including Bluetooth 5.0, dual-band 2.4G and 5G Wi-Fi, and a 4G modem supporting global network, ensuring seamless and reliable connectivity with user's preferred GNSS receivers and RTK network correction sources. The built-in 9000mAh battery provides long-lasting working performance.

Robust Device Protection

Designed for extreme durability, it can withstand drops from up to 1.2 meters high and comply with stringent IP68 standards. PCR500 excels in challenging environments, making data collection tasks easier and more efficient.

TECHNICAL PARAMETERS

ITEM		SPECIFICATION
SYSTEM	OS	Android 12
	CPU	Qualcomm SM6115 Kryo Gold: quad high-performance cores 2.0 GHz Kryo Silver: quad low-power cores 1.8 GHz
	Memory	4GB RAM + 64GB ROM
	External storage	Micro SD
PHYSICAL PARAMETERS	Display	Screen size : 5.5 inch, 500nit Resolution:1920*1080p
	Touch Panel	Multi-touch, support glove and wet hands operation
	Button	QWERTY keyboard, Power Key, Function key etc. Supported key light
	Back Camera	Rear 13MP, AF with double white LED Flash
	Sensors	Gyroscope, Accelerometer, Ambient Light and eCompass Sensor
	Other equipment	Speaker & Mic Support Motor Support Hand band Support Passive Stylus Support Charger, Replaceable interface
	Audio	Audio PA
	Interface	Type-C (USB3.0 Supports OTG) SIM: one Nano SIM card slot Indicator LED
DATA COMMUNICATION	GNSS	Qualcomm GPS/A-GPS, GLONASS, BDS, Galileo
	WIFI	IEEE 802.11 a/b/g/n/ac Dual-band: 2.4G/5G
	Network	GSM: 850/900/1800/1900 WCDMA: B1/B2/B4/B5/B8 LTE-TDD: B34/B38/B39/B40/B41 LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B17/B20/B25/B26/B28
	Bluetooth	BT5.0 (BLE)
	NFC	Supported
ELECTRICAL	Battery (non-removable)	9000mAh (Support Rapid Charging) Working time: 22 hours Charging time: Reaching 90% ⩽4 hours
PHYSICAL	Dimension	227.8mm*95.8mm*20.9mm
	Weight	420g
ENVIRONMENTAL	Temperature	Work Temperature: -20℃~+65℃ Storage Temperature: -30℃~+70℃
	Protection	IP68
	Shock	Withstand 1.2M pole drop
	ESD	Air discharge: ±10kV Contact discharge: ±8kV (External interface Contact discharge: 6KV, Air discharge: 8KV)
CERTIFICATE	Regulatory Compliance	CCC, CTA, SRRC, CE, FCC

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

P8/P8Pro Portable RTK Receiver

P8/P8Pro is a portable intelligent positioning terminal developed based on BDS high-precision positioning technology. The main unit is lightweight and compact, making it easy to carry around. It supports tracking of signals from all satellite constellations with 1408 channels, providing centimeter-level positioning accuracy. It caters to various measurement and layout tasks such as road construction, power line surveying, site leveling control, CAD applications, railway stakeout, and etc.



WIDTH	THICKNESS	WEIGHT
53.8mm	37 mm	141g

CHARACTERISTIC

Integrated Hardware & Software

Based on fully autonomous domestic hardware and the FreeRTOS intelligent system platform, this device provides users with efficient computing power and the ability to expand product functionality infinitely.

Centimeter-Level Positioning

P8/P8Pro Portable RTK Receiver is equipped with a compact and omnidirectional helical antenna. It supports tracking signals from all constellations and frequencies. With 1408 channels, it can simultaneously receive BDS, GPS, GLONASS, GALILEO, QZSS and SBAS signals. It enables full constellation positioning and supports base station differential correction. It can integrate with the GBAS. The accuracy can reach to centimeter-level precision.

Multipurpose

The Receiver supports 4G CAT1 network, Bluetooth connectivity for communication and control purposes. It can be combined with a cloud server to enable remote monitoring, configuration, and alerts for the main unit.

Compact & Portable

P8/P8Pro Portable RTK Receiver weighs only 141g, making it convenient for portable use. It also has low power consumption. With a built-in 1800mAh lithium battery, the device can work continuously for over 8 hours.

Tilt Measurement

P8Pro is equipped with a built-in intelligent high-precision inertial navigation module, providing real-time tilt compensation that enhances the accuracy of RTK measurements. It provides positioning accuracy of less than 2cm within a tilt range of 60 degrees. (Note: P8 does not support tilt measurement)

IP67 Design

Industrial design, in line with IP67 design requirements, safe and reliable.

TECHNICAL PARAMETERS

ITEM		SPECIFICATION
HARDWARE SYSTEM		ESP32 + ASR ARM
OS		FreeRTOS
GNSS	GPS	L1C/A, L2C, L2P(Y), L5
	GLONASS	G1, G2
	BDS	B1I, B2I, B3I, B1C, B2a
	GALILEO	E1, E5a, E5b
	QZSS	L1C/A, L2C, L5
	SBAS	L1C/A
	Channel	1408
	Data Format	NMEA-0183
	Correction I / O Protocol	RTCM3.X
	Data Update Frequency	5Hz
POSITIONING ACCURACY	Single (RMS)	Horizontal: 1.5m ; Vertical: 2.5m
	RTK(RMS)	Horizontal: 0.8cm+1ppm Vertical: 1.5cm+1ppm
SYSTEM	Network	Multi-network Compatible LTE FDD: B1, B3, B5, B8 LTE TDD: B34, B38, B39, B40, B41
	Bluetooth	BR+EDR
INDICATOR	Power Indicator	Show Power Status
	Satellite Indicator	Show Position Status
	Data link Indicator	Show Differential Signal Status
	Bluetooth Indicator	Show Bluetooth Status
ENVIRONMENTAL	Work Temperature	-20℃~+60℃
	Storage Temperature	-40℃~+85℃
	Protection	IP67
PHYSICAL	Material	PC+ABS
	Dimension	53.8mm*37mm*117.5mm (Height Including Helical Antenna)
	Weight	P8: 141g/ P8Pro:143g (Weight Including Helical Antenna)
BATTERY	Battery	7.4V 1800mAh
	Work Time	More than 8 hours
	Charge	5V 2A
A FULL SET	P8/P8Pro Device	1 SET
	Full-band Helical Antenna	1 PCS
	Plumb Rod Adapter	1 PCS
	5V/2A USB Power Adapter	1 PCS

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.

P8Glo Portable RTK Receiver

P8Global is a portable intelligent positioning terminal developed based on BDS high-precision positioning technology. The main unit is lightweight and compact, making it easy to carry around. It supports tracking of signals from all satellite constellations with 1408 channels, built-in high-precision IMU supports tilt measurement, providing centimeter-level positioning accuracy. It caters to various measurement and layout tasks such as road construction, power line surveying, site leveling control, CAD applications, railway stakeout, and etc.



WIDTH 60mm | THICKNESS 41.3mm | WEIGHT 176g

CHARACTERISTIC

Linux Intelligent System

ARM Cortex-A7 + Linux, the intelligent system platform, brings efficient computing and unlimited expansion of product functions to users.

Centimeter-Level Positioning

Equipped with a compact and omnidirectional helical antenna, it supports tracking signals from all constellations and frequencies. With 1408 channels, it can simultaneously receive BDS, GPS, GLONASS, GALILEO, QZSS, SBAS and NavIC(IRNSS) signals. It enables full constellation positioning and supports base station differential correction. It can integrate with the GBAS. The accuracy can reach to centimeter-level precision.

Qualcomm 4G Full Band Modem

The Receiver supports Qualcomm 4G Full Band Modem, Bluetooth connectivity for communication and control purposes. It can be combined with a cloud server to enable remote monitoring, configuration, and alerts for the main unit.

Compact & Portable

P8Global Portable RTK Receiver weighs only 176g, making it convenient for portable use. It also has low power consumption. With a built-in 2500mAh lithium battery, the device can work continuously for over 12 hours.

Tilt Measurement

P8Global is equipped with a built-in intelligent high-precision inertial navigation module, providing real-time tilt compensation that enhances the accuracy of RTK measurements. It provides positioning accuracy of less than 2cm within a tilt range of 60 degrees.

IP67 Design

Industrial design, in line with IP67 design requirements, safe and reliable.

TECHNICAL PARAMETERS

ITEM		SPECIFICATION	
HARDWARE SYSTEM		**ARM Cortex-A7 1.8GHz**	
OS		**Linux**	
GNSS	GPS	L1C/A, L1C, L2C, L2P(Y), L5	PPP-B2b, PPP-E6, SBAS supported
	GLONASS	G1, G2, G3	
	BDS	B1I, B2I, B3I, B1C, B2a, B2b	
	GALILEO	E1, E5a, E5b, E6	
	QZSS	L1C/A, L1C, L2C, L5	
	SBAS	L1C/A	
	NavIC(IRNSS)	L5(Require specialized firmware)	
	Channel	1408	
	Data Format	NMEA-0183	
	Correction I / O Protocol	RTCM3.X	
	Data Update Frequency	5Hz	
POSITIONING ACCURACY	Single (RMS)	Horizontal: 1.5m ; Vertical: 2.5m	
	RTK(RMS)	Horizontal: 0.8cm+1ppm Vertical: 1.5cm+1ppm	
	Tilt compensation Accuracy(within 60°)	⩽2cm	
SYSTEM	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	
	Bluetooth	BR+EDR+BLE	
INDICATOR	Power Indicator	Show Power Status	
	Satellite Indicator	Show Position Status	
	Data link Indicator	Show Differential Signal Status	
	Bluetooth Indicator	Show Bluetooth Status	
ENVIRONMENTAL	Work Temperature	-20℃~+60℃	
	Storage Temperature	-40℃~+85℃	
	Protection	IP67	
PHYSICAL	Material	PC+ABS	
	Dimension	60mm*41.3mm*126.3mm (Height Including Helical Antenna)	
	Weight	176g (Weight Including Helical Antenna)	
BATTERY	Battery	7.4V 2500mAh	
	Work Time	More than 12 hours	
	Charge	5V 2A	
A FULL SET	P8 Global Device	1 SET	
	Full-band Helical Antenna	1 PCS	
	Plumb Rod Adapter	1 PCS	
	5V/2A USB Power Adapter	1 PCS	
	USB Type C Charging Cable	1 PCS	

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.