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.

126.3 mm

WIDTH	THICKNESS	WEIGHT
60 mm	41.3 mm	176 g

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.