PHEREFIX

SP10

GNSS RTK SYSTEM

SP10 GNSS Receiver

The SP10 is a portable RTK device introduced by SphereFix. With a lightweight body weighing less than 510g, you can easily carry it anywhere. Its 60-degree tilt measurement capability allows you to handle various complex environments. It supports 4G global network connectivity, eliminating the need to change SIM cards for worldwide internet access. It also utilizes seamless inertial navigation technology, enabling measurement immediately upon startup.

HEIGHT	DIAMETER	WEIGHT
69mm	100.5mm	0.51kg

IMU60 SUPPORTED

The SP10 is possible to measure points with an inclination of the pole up to 60° even in harsh environments and in the presence of magnetic fields.

SMART SIZE

The SP10 is an intelligent, high precision data acquisition receiver that offers greater freedom of movement and flexibility.

4G MODEM

Featuring the GSM 4G modem, for a fully integrated communications choice, combined with a light and modern design.

EFFICIENT MEASUREMENT

With seamless inertial navigation, there's no need for calibration, which make you be raedy to measure upon startup.

CHARACTERISTIC

- Qualcomm *Cortex-A7*
- *Linux* intelligent system

- *BDS ,GPS ,GLONASS, GALILEO ,QZSS*
- 4G, Bluetooth, WiFi

- Centimeter level positioning
- Positioning accuracy of *less than 2cm* within the tilt *range of 60°*

- High-capacity lithium battery
- ultra long battery endurance

- Solid *magnesium alloy* shell
- In line with *IP65* design requirements, safe and reliable

C100 Data Controller

The C100 Controller is a rugged multifunctional data controller with design of 5.5 inch sunlight readable HD touch screen and an alphanumerical keypad. Equipped with powerful Octa-core processor and Android operating system. With professional IP67 rating, it is robust and reliable for outdoor harsh environment. The large capacity lithium battery guarantees more than 15 hours of field working for a whole day of multiple surveying tasks.

KEY FEATURES

- 5.5-inch sunlight readable HD touch screen
- 8-core 2.0GHz CPU
- Android 11 operating system
- 3GB RAM + 32GB ROM
- 13MP rear camera
- IP67 certified grade, water/shock/dust proof
- 7700mAh
- Wi-Fi, Bluetooth and 4G
- USB Type-C.

ITEM		SPECIFICATION	REMARKS
HARDWARE SYSTEM		Qualcomm Cortex-A7	
OS		Linux	
GNSS	GPS	L1C/A, L2P, L5	
	GLONASS	L1, L2	
	BDS	B1I, B2I, B3I, B1C, B2a	
	GALILEO	E1, E5a, E5b	
	QZSS	L1, L2, L5	
	Channel	1408	
	Data format	NMEA-0183	
	Correction I / O Protocol	RTCM3.X	
	Data update frequency	5Hz(max)	
	Recapture Time	<1s	
	Cold Boot	<40s	
POSITIONING ACCURACY	Single(RMS)	Horizontal: 1.5m Vertical: 2.5m	
	DGPS(RMS)	Horizontal: 0.4m Vertical: 0.8m	
	RTK(RMS)	Horizontal: ±(8mm+1ppm) Vertical: ±(15mm+1ppm)	
	Time Accuracy(RMS)	10ns	
	Static Accuracy(RMS)	Horizontal: ±(2.5mm+0.5ppm) Vertical: ±(5mm+0.5ppm)	
	Speed Accuracy(RMS)	0.2m/s	
	Tilt compensation Accuracy (within 60°)	<2cm	
SYSTEM	Bluetooth	BR+EDR+BLE	
	WIFI	802.11 b/g/n	
	Network	LTE FDD: B1/2/3/5/8 LTE TDD: B38/39/40/41 GSM: 900/1800MHz	
	Storage	32GB	
INDICATOR	Power Indicator	Show power status	
	Satellite Indicator	Show position status	
	Data link Indicator	Show differential signal status	
	Bluetooth Indicator	Show Bluetooth status	
BATTERY	Battery	3.7V, 9600mAh	The static working mode supports continuous data collection for 24 hours under full power
	Work time	More than 16 hours (Typical, Rover , GSM)	
	Charge	MTK PE + 1.1/2.0 9V/2A USB PD 12V/1.25A 5V/3A	Support fast charging adapter and adaptively and dynamically adjust charging current
ENVIRONMENT	Working Temperature	-20℃~+60℃	
	Storage Temperature	-40℃~+85℃	
	Shock	Withstand 1.5M pole drop	
	Protection	IP65	
PHYSICAL	Material	Magnesium alloy main body, ABS/PC top cover	
	Dimension(mm)	100.5*100.5*69	
	Weight(g)	510	

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

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