

SP10

GNSS RTK SYSTEM

IMU



4G Modem

SP10 GNSS Receiver

SP10 is a portable RTK device introduced by Spherefix. With a lightweight body weighing less than 510g, it can be easily carried anywhere. Its 60-degree tilt measurement capability allows you to handle various complex environments. It supports 4G network connectivity. It also utilizes seamless inertial navigation technology, enabling measurement immediately.



HEIGHT	DIAMETER	WEIGHT
69mm	100.5mm	510g



IMU

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

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.



Calibrating when startup

With seamless inertial navigation, there's no need for calibration, which makes you ready to measure upon startup.



GNSS

Characteristic



- ARM 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



C100T Data Controller

C100T control terminal is a versatile data controller crafted specifically for the surveying sector. It boasts an outstanding battery life of up to 18 hours. Its 5.45-inch display is readable in direct sunlight, and with an IP68 protection rating, it can withstand various harsh outdoor conditions. The powerful 8-core processor and Android 11 operating system ensure that the C100T operates efficiently and smoothly, and it is compatible with multiple measurement software applications, facilitating surveying tasks.



Key Features

- 5.45-inch sunlight readable HD touch screen
- 8-core 2.0GHz CPU
- Android 11 operating system
- 4GB RAM + 64GB ROM
- 13MP rear camera
- IP68 certified grade, water/shock/dust proof
- 9000mAh
- Wi-Fi, Bluetooth and 4G



ITEM		SPECIFICATION	REMARKS
HARDWARE SYSTEM		ARM Cortex-A7	
OS		Linux	
GNSS	GPS	L1C/A, L2P, L5	
	GLONASS	L1, L2	
	BDS	B1I, B2I, B3I, B1C, B2a, B2b	
	GALILEO	E1, E5a, E5b, E6	
	QZSS	L1, L2, L5	
	Channel	1408 channels	
	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: $\pm(8\text{mm}+1\text{ppm})$; Vertical: $\pm(15\text{mm}+1\text{ppm})$	
	Time Accuracy(RMS)	20ns	
	Static Accuracy(RMS)	Horizontal: $\pm(2.5\text{mm}+1\text{ppm})$; Vertical: $\pm(5\text{mm}+1\text{ppm})$	
	Speed Accuracy(RMS)	0.03m/s	
SYSTEM	Tilt compensation Accuracy (within 60°)	<2cm	
	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	
	Bluetooth Indicator	Show Bluetooth status	
	Data link Indicator	Show differential signal status	
BATTERY	Battery	3.7V, 9600mAh	
	Battery Endurance	More than 16 hours (Typical, Rover, GSM)	The static working mode supports continuous data collection for 24 hours under full power.
	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°C~+60°C	
	Storage Temperature	-20°C~+85°C	
	Anti-vibration	Resistant to 1.5m drop with pole at room temperature	
	Protection	IP65	
PHYSICAL	Material	Magnesium alloy main body, ABS/PC top cover	
	Dimension	100.5mm*100.5mm*69mm	
	Weight	510g	

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