PHEREFIX

SP30Se
GNSS RTK SYSTEM

5W built-in radio

4G Full-netcom

SP30Se GNSS Receiver

SP30Se is a multifunctional GNSS receiver with Linux operating system that supports receiving all satellite signals. The new generation measurement engine supports tilt surveying and has built-in 4G full network communication, Bluetooth, WIFI and 5W digital transmission radio. The transmission distance in open areas can reach 16km. Combined with a lightweight and portable design, it makes your surveying and mapping work more intelligent and efficient.

HEIGHT	DIAMETER	WEIGHT
86.6mm	145.7mm	1000g

Receive all satellite signals

SP30Se integrates high-precision positioning module, configures 1408 high-speed channels, supports BDS B1I, B2I, B3I, B1C, B2a, B2b(PPP-B2b), GPS L1C/A, L1C, L2C, L5, GLONASS L1, L2, L3, Galileo E1, E5a, E5b, E6(PPP-E6), QZSS L1, L2, L5, SBAS and NavIC(IRNSS).

5W built-in radio

When SP30Se is used as a base station, transmitting at 5W high power inopen areas, with a distance of up to 16KM.

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Combining a lightweight and modern design, SP30Se is equipped with a 4G modem, providing fully integrated communication options.

Ultra-long endurance

The built-in large-capacity battery enables it to operate continuously for more than 10 hours in the Base mode.

Characteristic

- ARM Cortex-A7
- Linux intelligent system

- BDS ,GPS ,GLONASS, Galileo ,QZSS, SBAS, NavIC
- 4G, Radio,Bluetooth,WiFi

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

- High-capacity lithium battery
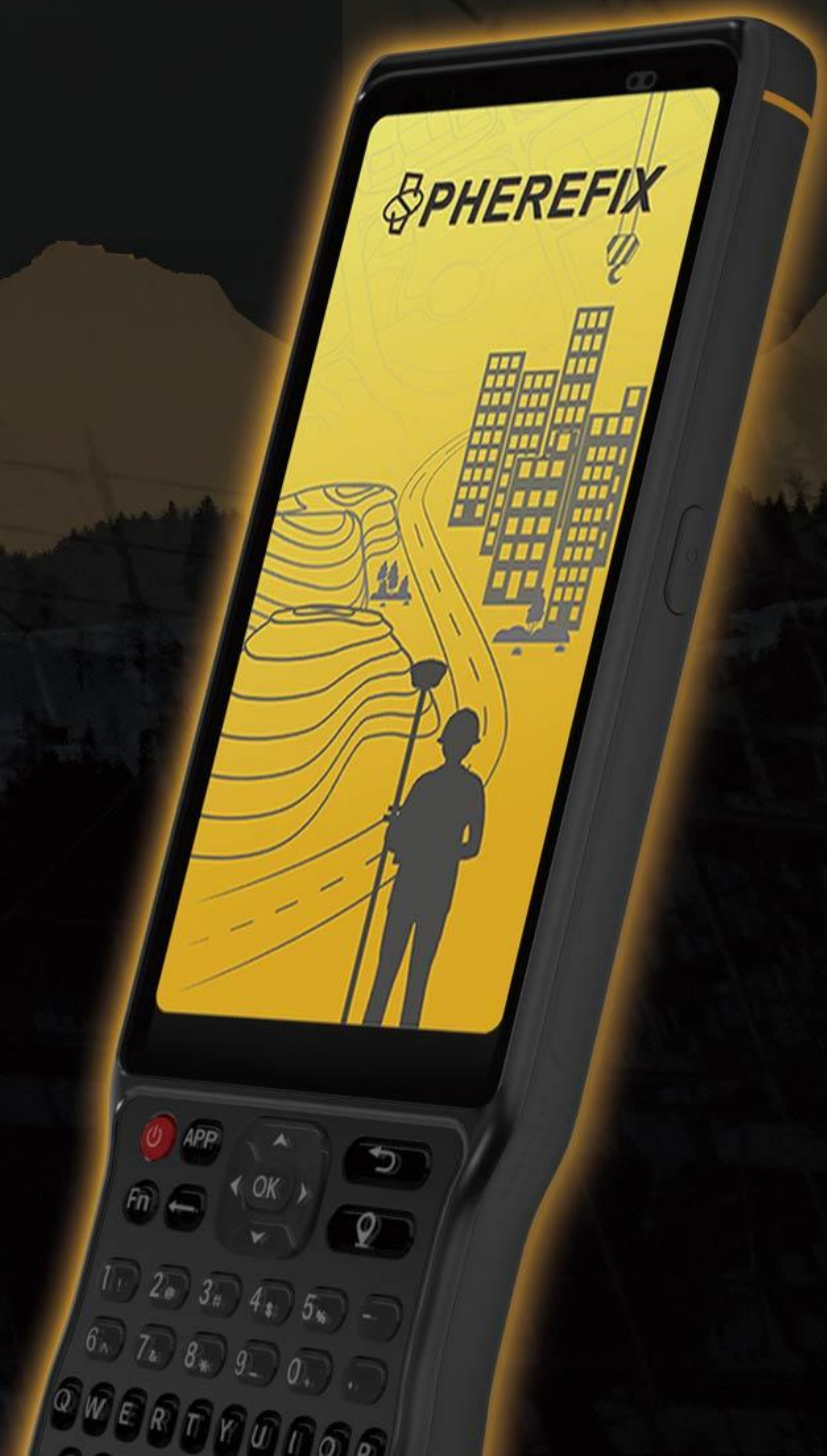- ultra long battery endurance

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, Network and 4G

ITEM		SPECIFICATION	REMARKS
HARDWARE SYSTEM		ARM Cortex-A7	
OS		Linux	
GNSS	GPS	L1C/A, L1C,L2P(Y), L2C,L5	
	GLONASS	L1, L2, L3	Support PPP-B2b
	BDS	B1I, B2I, B3I, B1C, B2a, B2b	Support PPP-E6
	GALILEO	E1, E5a, E5b, E6	Support SBAS
	QZSS	L1, L2, L5	
	SBAS	L1	
	NavIC(IRNSS)*	L5*	Requires latest firmware support
	Channel	1408 channels	
	Data format	NMEA-0183	
	Correction I / O Protocol	RTCM3.X	
	Data update frequency	20Hz	
	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)	20ns	
	Static Accuracy(RMS)	Horizontal: ±(2.5mm+1ppm); Vertical: ±(5mm+1ppm)	
	Speed Accuracy(RMS)	0.03m/s	
	Tilt compensation Accuracy (within 60°)	<2cm	
SYSTEM	Bluetooth	BR+EDR+BLE	
	WIFI	802.11 b/g/n	
	Network	LTE FDD: B1/2/3/4/5/7/8/18/19/20/25/26/28 LTE TDD: B38/39/40/41 WCDMA: B1/2/4/5/6/8/19 GSM: B2/3/5/8	
	Data Radio	Transceiver station Frequency: 410~470MHz Power: 1W/2W/5W Air baud rate: 9600, 19200bps Protocol: TRIMTALK, TRIMMK3, SOUTH, TRANSEOT	
	Storage	32GB	
INDICATOR	Power Indicator	Show power status	
	Satellite Indicator	Show position status	
	Bluetooth Indicator	Lights up when Bluetooth is connected	
	Data link Indicator	Show differential signal status	
BATTERY	Battery	7.4V,10000mAh	TBD
	Battery Endurance	More than 24 hours (In Phone network data link mode)	TBD
	Charge	Support USB PD 12V/2A, USB DCP 5V/3A Support external power supply 9~24VDC	
ENVIRONMENT	Working Temperature	-20℃~+60℃	
	Storage Temperature	-20℃~+70℃	
	Anti-vibration	Resistant to 1.5m drop with pole at room temperature	
	Protection	IP68	
PHYSICAL	Material	Magnesium alloy shell+ABS/PC plastic top cover	
	Dimension	Φ145.7mm*93.6mm	
	Weight	1000g	TBD

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