

SFAIRA ONE PLUS

GNSS RECEIVER

Easy Surveying, Precise Positioning



EASY-TO-USE DESIGN

Connected via Bluetooth, the Sfaira ONE Plus can connect to your CORS account smoothly from your smart phone and get a stable FIXED RTK solution. With a 5s simple tilt function initialization, you can directly start point survey, stakeout and other tasks within 60° tilt range through the SingularPad field software.

CENTIMETER ACCURACY

Designing for smaller size doesn't mean sacrificing GNSS performance. The Sfaira ONE Plus GNSS receiver is equipped with a high-precision GNSS engine, which can simultaneously track GPS, BDS, GLONASS, Galileo & QZSS, providing stable and accurate centimeter-level positioning in various environments.

POCKET SIZE & 18HRS BATTERY

Especially made for CORS users, the Sfaira ONE Plus is designed as small as possible while retaining the necessary functionality. Pocket-sized and lightweight at 409g, you can easily take it anywhere. Over 16hrs of battery life keeps you from power outages, which can also be charged via the Type-C port using a power bank.

SATELLITES TRACKING

Channels	1408
BDS	B1I, B2I, B3I, B1C, B2a, B2b ¹
GPS	L1 C/A, L1C ¹ , L2P, L2C, L5
GLONASS	L1, L2, L3 ¹
Galileo	E1, E5a, E5b, E6 ¹
QZSS	L1, L2, L5
Cold start	<30s
Warm start	<20s
RTK initialization time	<5s (typical)
RTK initialization reliability	>99.9%
Re-acquisition	<1s

ACCURACY

Standalone	1.5m Horizontally 2.5m Vertically
DGPS	0.4m Horizontally 0.8m Vertically
RTK	8mm+1ppm Horizontally 15mm+1ppm Vertically

TILT FUNCTION

Tilt range	60° tilt range
Tilt survey accuracy	±2.5cm within 60° tilt range
IMU Initialization time	5s

DATA FORMAT

Positioning data format	NMEA-0183
Correction data format	- RTCM v3.3/3.2/3.1/3.0
Data protocol	Ntrip
Data update rate	1 Hz
Baud rate	115200 bps

COMMUNICATION

Bluetooth	BT4.0
Interface	Type-C, for charging and firmware upgrade

ELECTRICAL

Power consumption	1.0 W
Input voltage	5V DC ≤ 2A
Battery	4800 mAh - Up to 16 hours working time, with continuous Bluetooth transmission, satellite tracking and RTK surveying

PHYSICAL

Size	Φ50 mm × 149 mm
Weight	409g
Button	1 power button
Indicator	2 LEDs, indicating satellite tracking and battery status

ENVIRONMENTAL

Working temperature	-45 °C to + 75 °C
Storage temperature	-55 °C to + 85 °C
Waterproof & dustproof	IP65
Drop	Designed to survive a 1.5m drop onto concrete

1. BDS B2b, GPS L1C, GLONASS L3 and Galileo E6 signals are reserved for future upgrade.

All specifications are subject to change without notice.

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