SingularXYZ®

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 & 16HRS 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.

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SFAIRA ONE PLUS GNSS RECEIVER

SATELLITES TRACKING

Channels	1408
BDS	B1I, B2I, B3I, B1C, B2a, B2b
GPS	L1C/A, L1C, L2C, L2P(Y), L5
GLONASS	G1, G2, G3
Galileo	E1, E5a, E5b, E6
QZSS	L1C/A, L1C, L2C, L5
NavIC	L5
SBAS	WAAS, EGNOS, SDCM, BDSBAS, GAGAN
L-Band	Support
Cold start	<30s
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
Static post-processing	2.5mm+0.5ppm Horizontally 5mm+0.5ppm Vertically
RTK	8mm+1ppm Horizontally 15mm+1ppm Vertically
PPP	5cm Horizontally 10cm Vertically
SBAS	< 1.0 m 3D RMS
Time Accuracy	20ns
Tilt surveying	<±2.5cm, within 60° tilt

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 - 2 hours fast charge - 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 ℃ to + 75 ℃
Storage temperature	-55 ℃ to + 85 ℃
Waterproof & dustproof	IP65
Drop	Designed to survive a 1.5m drop onto concrete

All specifications are subject to change without notice.

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