

# P2

## GNSS RECEIVER

Accurate, Wearable, Alert: Elevating Construction Safety.



### CENTIMETER POSITIONING

Considering obstacles in the construction site and in order to handle more complex environments, P2 GNSS receiver is upgraded with 1408-channel GNSS engine, tracking GPS, BDS, GLONASS, Galileo and QZSS synchronously, providing enhancing consistent and reliable centimeter-level positioning.

### WEARABLE & FLEXIBLE

Designed with versatility, the P2 offers exceptional adaptability. It can be mounted on a range pole for professional land surveying. Or utilized as a handheld device for convenient GIS data collection. You can also wear it on the arm, around the neck, or install it on a helmet to enhance personnel safety.

### FOR CONSTRUCTION SAFETY

Specially made for construction safety, the internal 4G of P2 can return real-time location data of on-site personnel. In case someone enters a danger zone, P2 swiftly alerts them via two warning lights, voice alert and vibration alert. To support seamless integration of various projects, SingularXYZ offers an SDK for third-party platform development.

## SATELLITES TRACKING

Channels	1408
BDS	B1I, B2I, B3I, B1C, B2a
GPS	L1C/A, L2C, L2P, L5
GLONASS	G1, G2
Galileo	E1, E5a, E5b, E6
QZSS	L1C/A, L2C, L5
SBAS	WAAS, EGNOS, SDCM, BDSBAS, GAGAN
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
SBAS	< 1.0 m 3D RMS
Time Accuracy	20ns

## COMMUNICATION

Bluetooth	BT4.2 BR/EDR
WiFi	802.11 b/g/n
4G	LTE-FDD: B1/B3/B5/B7/B8/B20/B28 LTE-TDD: B38/B40/B41 GSM: Band 850/900/1800/1900 MHz

## ELECTRICAL

Battery	4000mAh
Input Voltage	5V, 2A

## PHYSICAL

Size	135*70*22mm (L*W*H)
Weight	199g

## FUNCTIONALITY

Visual Alert	Two bright lights flash to provide a warning signal
Auditory Alert	Emits a loud and distinctive sound as an alert
vibration alert	The wearable vibrates vigorously to alert the wearer.
IMU	Reserved
UWB	Reserved

## ENVIRONMENTAL

Waterproof & dustproof	IP67
Shock	1.5 m drop onto concrete
Operating temperature	-20 °C to + 60 °C
Storage temperature	-20 °C to + 60 °C
Humidity	100% non-condensing

## APPLICATION

Construction Safety
Geographical information collection
Personnel positioning
Vehicle trajectory tracking
Inspection and investigation
Other high precision applications

All specifications are subject to change without notice.

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