PozStar

Perfect Positioning for Success!

High-Performance RTK GNSS Receiver

PozStar P5

Perfect Positioning for Success

- The Latest GNSS Module
- 1408 channels
- Compact and durable design
- The reliable and fast fix time
- The high accuracy
- Supported by its own field APP, PozPad
- Korean and English language

www.pozstar.com

The Pozstar's own GNSS Main Board

- The high-precision board design based on GNSS System on Chip
- The latest GNSS module
- 1408 channels
- Receiving all GNSS satellites and all kinds of satellites
- Independent tracking of various frequencies
- Interference measurements of unwanted frequencies

Hardware components

Power

Bluetooth

Data Communication

Satellite Signal

Power Button

Radio Antenna Connector

5-Pin Serial Port

USB (Type-C) Port

- 4 LEDs on the front panel
- Radio antenna connector used within 410 to 470 MHz frequency
- 5-pin serial port for external radio system connectivity and NMEA data output
- USB C-Type port for charging

IMU technology of PozStar™ P5

60°

- Supporting tilted measurement
- Fast and precise surveys
- Fast initialization and accurate measurements
- Up to 60° inclination

Light weight and IMU tilt sensor

135mm

88.2mm

825g

- 135mm x 88.2mm size for improved portability
- Light weight 825g
- Easy IMU calibration for flexible and convenient tilt measurements

High-quality components

- High-quality SAMSUNG lithium-ion battery
- 6,700mAh battery pack structure for long-term use
- Die-casting technique
- Elastomer dual construction
- Powder coating
- IP67 grade

Android-based Field Software, PozPad

- Surveying only by Android smartphones or tablets
- Collecting control and surveying data for surveying, map input, and drawing operations
- Graphic interfaces and intuitive menu settings
- English and Korean language
- Bluetooth remote control connections
- Customizing softwares

RTK

18h

6,800mAh*EA
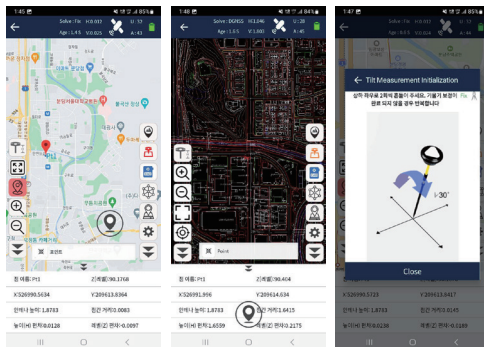
SAMSUNG Battery Cell

High-precision GNSS Receiver

Designed for high durability

- Die-casting technique
- Shielding structure for safe protection of the main board
- Elastomer dual construction to withstand 2 meter drop shocks
- Powder coating that has better scratch resistance and hardness
- Excellent dustproof and waterproof performance with IP67 grade

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- Mapping operation - CAD function, real-time data collection, altitude control (supporting Google Map, Naver Map)

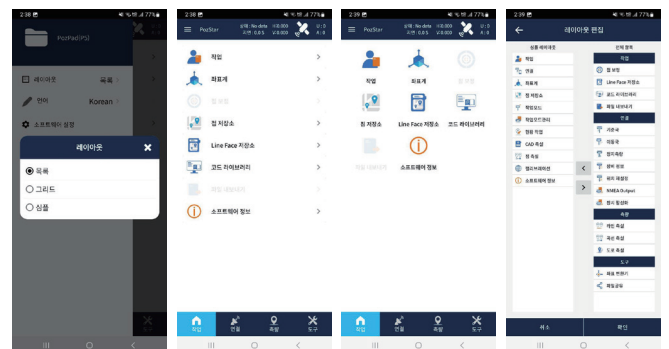- Checking out the real-time: location information, satellite map, satellite list

Staking out
- staking out with CAD engine
- alarm signal when the stakeout point is approached

- Allowing users to select options fit for their work

Optional: supporting SurPad APP

We are the only commercial supplier of RTK GNSS receivers in Korea that actually manufactures what it sells. The effort of PozStar P5 enables it to immediately reflect the feedback from its users and give good after-sales services to customers. All processes of the PozStar P5's softwares and hardwares are being made from its initial development to design, mold, and production in Korea. PozPad, its Android-based data collection software, ensures high quality and high work efficiency for users. We guarantee PozStar P5's high quality and your satisfaction is our top priority.

Performance

Channels	1408 channels
GPS	L1 C/A, L1C, L2P(Y), L2C, L5
BDS	B1I, B2I, B3I, B1C, B2a, B2b
GLONASS	G1, G2, G3
GALILEO	E1, E5a, E5b, E6
QZSS	L1, L2, L5
SBAS	WAAS, GAGAN, MSAS, EGNOS, SDCM, BDS
NavIC	L5

GNSS Accuracy

Cold start	< 12 seconds
Warm start	< 4 seconds
RTK signal initialization	> 99.9 %
Update rate	20 Hz
Static and fast static	- H: 3 mm + 0.5 ppm (RMS)
	- V: 5 mm + 0.5 ppm (RMS)
RTK	- H: 0.8 cm + 1 ppm (RMS)
	- V: 1.5 cm + 1 ppm (RMS)
Standard	- H: 1.5 m (RMS)
point positioning	- V: 2.5 m (RMS)
Code differential	- H: 0.4 m (RMS)
	- V: 0.8 m (RMS)
SBAS	- H: 0.3 m (RMS)
	- V: 0.6 m (RMS)
Correction data	RTCM V3.X, RTCM2, CMR
High Accuracy Static	- H: 3 mm $\pm$ 0.1 ppm (RMS)
	- V: 3.5 mm $\pm$ 0.4 ppm (RMS)

Power Supply

Power consumption	2.2 W (depending on user settings)
Li-ion battery capacity	Built-in rechargeable 67000mAh Samsung cell
Operating time	RTK Rover: 12 h
	Static: 18 h
External power	5 V / 3 A

Hardware

Size	136 x 136 x 86 mm (5.4 x 5.4 x 3.4 in)
Weight	825 g
Speaker	1 W (multilingual support)
Environment	Operating: -40 °C to +65 °C (-40 °F to +149°F) Storage: -40 °C to +85 °C (-40 °F to +185 °F)
Humidity	100 % condensation
Ingress protection	IP67 waterproof and dustproof, protected from temporary, immersion to depth 1m
Shock	Survive a 2-meter pole drop
Tilt sensor	MEMS IMU load compensation Immune to magnetic disturbance
Front panel	4 LEDs

Communication and Data Recording

Wi-Fi	802.11 b/g/n, access point mode
Bluetooth ®	LE V4.1
Ports	1 x USB Type-C port (data download, charging, firmware update) 1 x 5-pin port
UHF radio optional	Frequency: 410-470MHz Output power: 0.5W / 1W Operation range: 3~5 km Protocol: TRIMTALK, TRIMMK3, TT450, TRANSEOT, SATEL" Link rate: 4800 bps - 19200 bps 1 x UHF antenna port
5-pin port	External radio and power NMEA output CMR input and output
Data formats	RTCM 2.x, RTCM 3.x input and output NMEA 0183 output RINEX static formats NTRIP client (on PDA network)
Data storage	8GB SAMSUNG High-speed memory

High-precision GNSS receiver