

202/204G MiniPod



Key features

- Robust GNSS receiver with integrated antenna
- Multi-band L1 + L2 + L5 receiver
- RTK Moving Base and Rover Operation
- Multi-constellation of positioning satellites
- External Sensor Integration
- Submersible, 1000m rated
- Wide area corrections or external RTCM
- Assembly shock rated to 75G for field endurance in harsh conditions
- Worldwide RF remote wireless data options
- Dual antenna positioning
- Heading information
- Omni Directional wireless antenna

Applications

- Seismic streamer head and tail positioning
- Seismic source positioning
- Offshore construction
- Ideal for subsea excavation vehicles (jetting & trenching), and surface positioning of towed sensors such as magnetometers, operating in shallow waters
- Vehicle positioning when towing items offshore (e.g. cabling)

201G MiniPod Overview

The 202G/204G MiniPod is a lightweight, ruggedised Tri-band GNSS receiver with configuration options. These allow for a RTK base, RTK rover and RTK moving base solutions to be used with more than one MiniPod in operation. Additional external sensor information can be added to the wireless protocol.

This enables the MiniPod to record precise GNSS positioning data remotely, including accurate dual axis inclination, temperature sensors, and information received from other data measurement devices.

Technical Specification

MODEL VARIANTS

Housing material	White Acetyl
Dimensions	Ø115 mm x 170 mm
Weight	1.95 kg

Model Part Number	Dual Antenna GNSS	INS/AHRS (A Suffix)	EXT PPS (+ Suffix)	RF Standard Range*	External RF Antenna **(EXT Suffix)	Depth Rating
BCN-202A	Dual antenna	Optional	Optional 16-way Bulkhead	300 m OMNI	Up to 2000 m operating range (IP67 only antenna)	50 m
BCN-204G	Dual antenna	Optional		300 m OMNI	N/A	1000 m

* Dual antenna GNSS come configured standard with an omni directional antenna. A directional antenna is available instead.

** External antenna options will have no internal antenna fitted inside.

Specifications of GNSS

GNSS SIGNALS

544 hardware channels for simultaneous tracking of most visible signals:

- GPS: L1 C/A, L2C, L2 P(Y), L5
- GLONASS: L1 C/A, L2C/A, L3, L2P
- BeiDou: B1I, B1C, B2a, B2I, B3I
- Galileo: E1, E5a, E5b
- QZSS: L1 C/A, L2C, L5
- NavIC: L5
- SBAS: EGNOS, WAAS, GAGAN, MSAS, SDCM

Position Accuracy (2,3)

Accuracies dependent on multipath environment, number of satellites in view, geometry and ionospheric conditions.

	Vertical	Horizontal
Standalone	12 m	1.9 m
SBAS	0.6 m	0.8 m
DGNSS	0.4 m	0.7 m

Position Accuracy (2,3)

Horizontal accuracy	0.6 cm + 0.5 ppm
Vertical accuracy	1 cm + ppm
Initialisation	7 s

Septentrio's patented GNSS+ technologies

- AIM+ unique anti-jamming and monitoring system against narrow and wideband interference with spectrum analyser
- IONO+ advanced scintillation mitigation
- APME+ a posteriori multipath estimator for code and phase multipath mitigation
- LOCK+ superior tracking robustness under heavy mechanical shocks or vibrations
- RAIM+ (Receiver Autonomous Integrity Monitoring)
- Optional feature
- Open sky conditions
- RMS level
- Baseline < 40km
- 5. 99.9%
- Including software compensation of sawtooth effect
- No information available (no almanac, no approximate position)
- Ephemeris and approximate position known