

HIGH PRECISION GNSS/INS

PolyNav 3000H/P



The PolyNav 3000H/P is a compact and robust navigation solution for ground, marine, rail or aircraft-based systems. It is a tightly coupled GNSS and INS system integrating a multi-constellation, triple-frequency GNSS receiver and a tactical grade IMU. It provides superior performance under GNSS challenged environments and helps bridge GNSS outages. With the built-in RTK engine, it delivers up to centimeter level accurate positioning, velocity and attitude solution. It is designed for easy integration with onboard NTRIP client and server support and customizable internal storage. Its software is upgradeable in the field, which allows the customers to generate custom solutions required for their application.

FEATURES

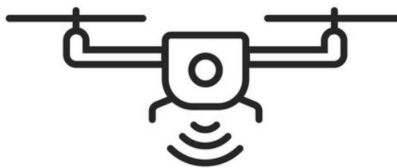
- Multi-constellation tracking provides high availability
- Triple-frequency (L1/L2/L5) signal tracking enables high accuracy
- Tightly coupled GNSS and INS systems
- Dual antenna for rapid heading alignment
- Software upgradeable in the field
- Customizable onboard data storage
- 1 PPS output
- Support accessories: Ethernet, CAN, UART, DMI
- System options
 - Heave message for the marine application is available



APPLICATIONS



Surveying and Mapping



UAV
Unmanned Aerial Vehicles



Marine Applications



Visit www.polyexplore.com for more information.

High-Performance, Cost-Effective Navigation & Mapping Solutions.

PolyExplore Inc.

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REV. 1.05

SYSTEM SPECIFICATIONS

High Precision GNSS/INS PolyNav 3000H/P

GNSS/INS

Constellations	GPS/GLONASS/BDS/Galileo
Signal Tracking	GPS L1C/A, L2C, L2P(Y), L5 GLONASS G1, G2 BDS B1I, B2I, B3I Galileo E1, E5a, E5b QZSS L1C/A, L2C, L5 SBAS L1C/A
Position Accuracy	
Single Point Positioning Horizontal	1.5 m
Single Point Positioning Vertical	2.5 m
DGPS Horizontal	0.4 m
DGPS Vertical	0.8 m
RTK Horizontal	0.8 cm + 1 ppm
RTK Vertical	1.5 cm + 1 ppm
Velocity Accuracy	0.03 m/s
Pitch/Roll	0.005° (H), 0.03° (P)
Heading	0.08° (1 m baseline)
Measurement Rate	100 Hz
Cold Start	< 30 s

PHYSICAL & ELECTRICAL

Dimension	170 mm x 121 mm x 54 mm
Weight	840 g
Power	12 VDC
Interfaces	Ethernet CAN 2 Serial Ports Odometer

ENVIRONMENTAL

Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +95°C
Ingress Protection Rating	IP67

IMU

PolyNav 3000H	Gyros	Accelerometers
Dynamic Range	125°/s	8g
Bias Instability	0.8°/hr	3.2µg
Angular Random Walk	0.09°/√hr	0.008m/s/√hr

PolyNav 3000P	Gyros	Accelerometers
Dynamic Range	125°/s	8g
Bias Instability	2°/hr	3.6µg
Angular Random Walk	0.15°/√hr	0.012m/s/√hr



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