LPMS-NAV2-RS232

High Accuracy Navigation Sensor with RS232 Interface and Water Proof Housing

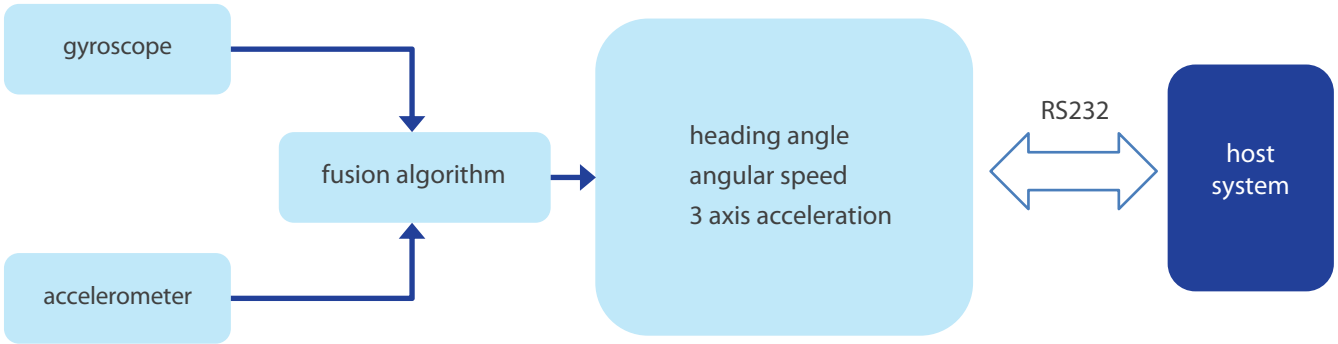
LPMS-NAV2-RS232 is a water proof inertial sensor for navigation application, which is composed of a high accuracy one-axis gyroscope and a 3-axis accelerometer. With the use of our novel fusion algorithm, LPMS-NAV2-RS232 can achieve precise heading information with ultra-low drift errors. The output data includes heading angle, angular speed and acceleration via RS232 interface. The high performance and rugged housing design of LPMS-NAV2-RS232 make it specially suitable for industrial applications of mobile robot/vehicle navigation.

Main Features

- based on MEMS inertial sensors
- integrating one-axis gyro and 3-axis accelerometer
- novel sensor fusion algorithm
- precise heading data output
- low noise
- high robustness
- interface: rs232
- water proof: IP67

Application:

- robotics
- motion capture
- automated guided vehicle (AGV)
- stability control



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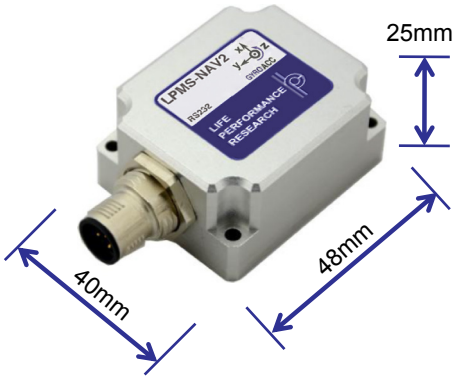
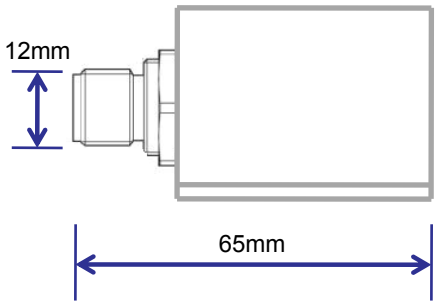
Specifications

Parameter	LPMS-NAV2-RS232
Size	40×48×25mm
Weight	70.1g
Heading range	±180° / 0~360° (selectable)
Angle resolution	0.01° (Max.)
Angular speed range	± 400dps
Acceleration range	± 4g
Data output rate	10~100 Hz selectable
RS232 baudrate	19200~115200bps selectable
Heading linear error	< 0.1°/m
Angle random walk (f=10Hz)	0.18°/ √h
Bias stability (f=10Hz)	< 5°/h
Power consumption	~14mA (@12V)
Power supply	5~18V DC
Water proof	IP67
Housing material	Aluminum
Working temperature	-20~80˚C
Stock temperature	-40~85˚C

Dimension

LPMS-NAV2-RS232:

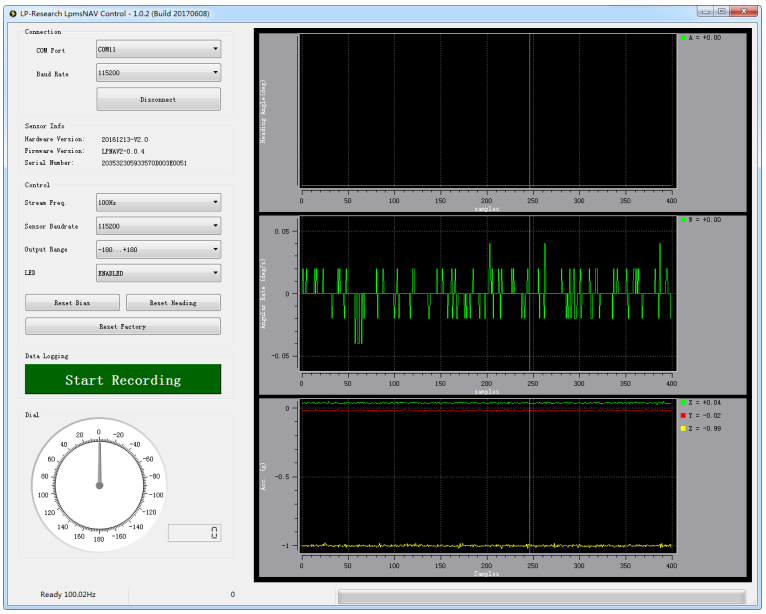




Package

- LPMS-NAV2-RS232 sensor x 1
- User guide card x 1
- Water proof cable x 1
- Package box x 1
- Warranty: 1 year

GUI in Windows



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