



LPMS-B

LPMS Wireless Miniature Motion Sensor / IMU / AHRS with Bluetooth Connectivity

The LPMS-B is an innovative and high performance miniature wireless motion sensor. Based on Bluetooth technology, LPMS-B can easily communicate with other host systems like PCs, mobile devices etc. LPMS-B perfectly fits both machine and human motion measurements for size and cost sensitive applications.

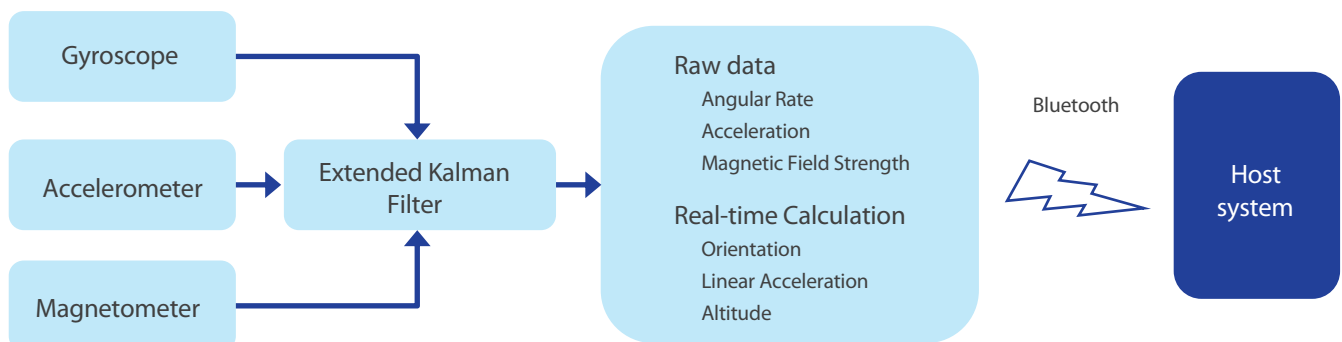


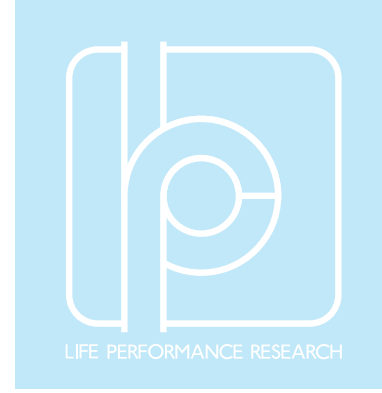
Key Features

- MEMS miniature inertial measurement unit (IMU)
- Integration of 3-axis gyroscope, accelerometer, magnetometer, temperature and barometric pressure sensor in one unit
- Real-time, on-device calculation of sensor orientation, linear acceleration and altitude
- Data output rates of up to 400Hz
- Wireless communication via Bluetooth Classic 2
- Control application and SDK for Windows, Linux and Android

Applications

- Human motion capture
- Internet of Things (IoT) devices
- Sports performance evaluation
- Drone flight control



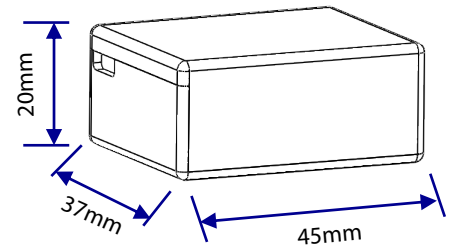


Sensor Specifications

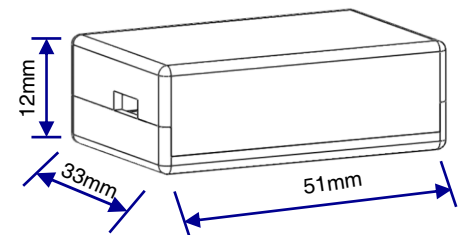
	LPMS-B	LPMS-B OEM
Size	45×37×20mm	28×20×12mm
Weight	34g	7g
Bluetooth	2.1 + EDR, 2.412 - 2.484 GHz	
Communication distance	< 18 m	
Orientation range	360° about all axes	
Resolution	< 0. 05°	
Accuracy	< 0. 5°(static), < 2° RMS (dynamic)	
Accelerometer	3-axis, ±20 / ± 40 / ± 80 / ± 160 m/s ² , 16 bits	
Gyroscope	3-axis, ± 250 / ± 500 / ± 2000 °/s, 16 bits	
Magnetometer	3-axis, ± 130 ~ ± 810uT, 16 bits	
Pressure sensor	300-1100 hPa*	
Data output format	Raw data / Euler angle / Quaternion	
Data output rate	up to 400 Hz	
Power consumption	290mW @ 3.3V	
Power supply	Lithium battery > 10h (3.7 v@ 230mAh)	3.3-5.5V DC
Temperature range	-20 ~ +60°C	-40 ~ +80°C
Connector	Micro USB, Type B	
Software	C++ library for Windows, Java library for Android, LpmsControl software and Open Motion Analysis Toolkit (OpenMAT) for Windows.	

Mechanical Drawing

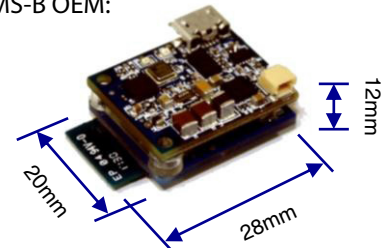
LPMS-B:



Recharger (20g):



LPMS-B OEM:



*An optional pressure sensor is available for altitude measurement.

Package

- LPMS-B sensor x 1
- Recharger x 1
- User guide card x 1
- Cable x 2
- Warranty (1 year)



LpmsControl Utility Software

