



LPMS-B2

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

The LPMS-B2 is an innovative and high performance miniature wireless motion sensor. Based on Bluetooth technology, LPMS-B2 communicates with host systems like PCs, mobile devices etc. While maintaining high accuracy and quality, LPMS-B2 perfectly fits both machine and human motion measurements for size and cost sensitive applications.

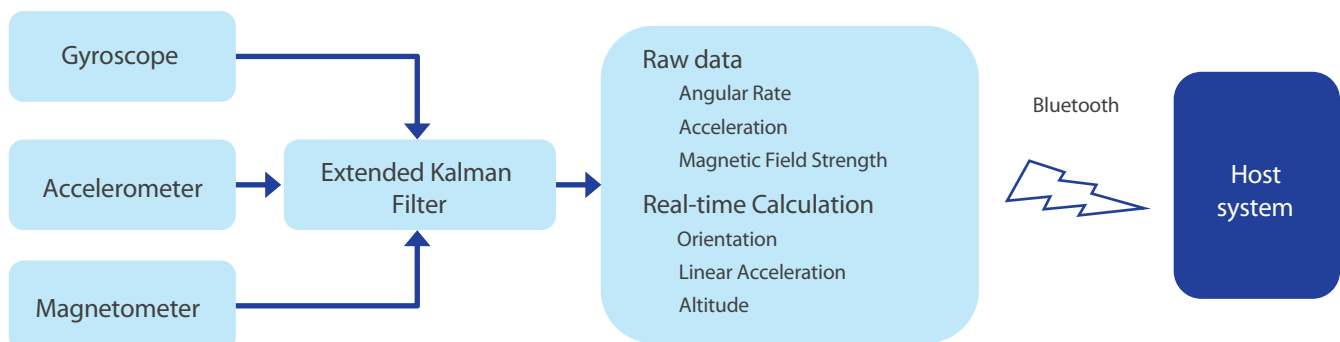


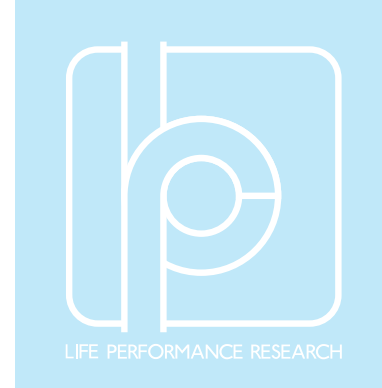
Key Features

- 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 2 and Bluetooth LE (Low Energy / 4)
- Capability to record measurement data on device flash memory
- Control application and SDK for Windows, Linux and mobile platform (Android)

Applications

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



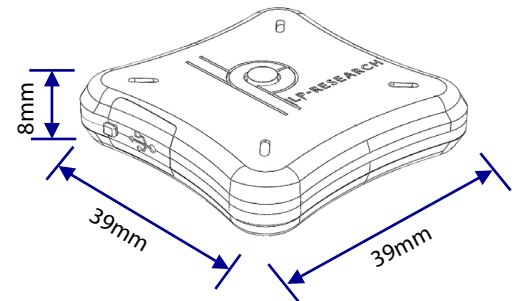


Sensor Specifications

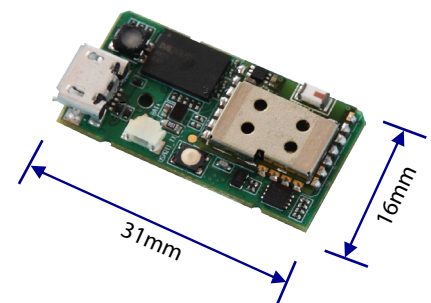
	LPMS-B2	LPMS-B2 OEM
Size	39x39x8mm	16x31x4mm
Weight	12g	2g
Bluetooth	Bluetooth 2 / Low Energy (LE)	
Communication distance	< 20 m	
Orientation range	Roll: $\pm 180^\circ$; Pitch: $\pm 90^\circ$; Yaw: $\pm 180^\circ$;	
Resolution	< 0.01°	
Accuracy	< 0.5°(static), < 2° RMS (dynamic)	
Accelerometer	3-axis, $\pm 2 / \pm 4 / \pm 8 / \pm 16$ g, 16 bits	
Gyroscope	3-axis, $\pm 125 / \pm 245 / \pm 500 / \pm 1000 / \pm 2000$ dps, 16 bits	
Magnetometer	3-axis, $\pm 4 / \pm 8 / \pm 12 / \pm 16$ gauss, 16 bits	
Pressure sensor	300-1100 hPa	
Data output format	Raw data / Euler angle / Quaternion	
Data output rate	up to 400Hz	
Power consumption	< 132 mW @ 3.3V	
Power supply	Lithium battery >6h (3.7 v@ 230mAh)	3.3-5.5V DC
Temperature range	-20 to +60°C	-40 to +80°C
Power Connector	Micro USB, Type B	Micro USB, Type B; SM02B-SURS-TF;
Software	C++ library for Windows, Java library for Android, LpmsControl software and Open Motion Analysis Toolkit (OpenMAT) for Windows.	

Mechanical Drawing

LPMS-B2:



LPMS-B2 OEM:



Package

- LPMS-B2 sensor x 1
- User guide card x 1
- Cable x 1
- Box x 1
- Warranty (1 year)



LpmsControl Utility Software

