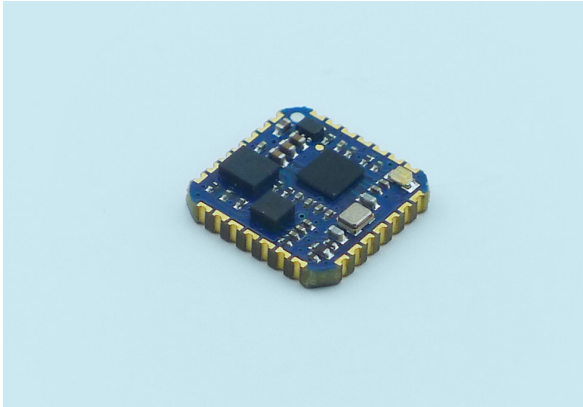


LPMS-ME1

LPMS Miniature Motion Sensor/IMU/AHRS

The LPMS-ME1 is a low cost, high performance inertial measurement unit (IMU) with 9 axis. It integrates multiple sensors including 3-axis accelerometer, 3-axis gyroscope and 3-axis magnetometer. And after the correction and calculation through the unique algorithm of our company, it can provide precise data including Euler angles, quaternion and linear acceleration. In the meanwhile, the size of LPMS-ME1 is very small, which means it is easy to assemble, convenient for you to embed it in your system and good for your design and development.

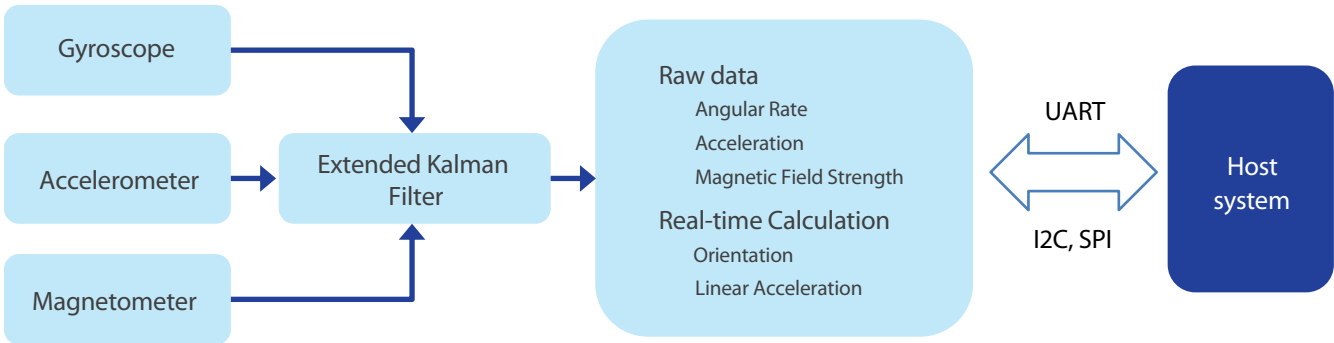


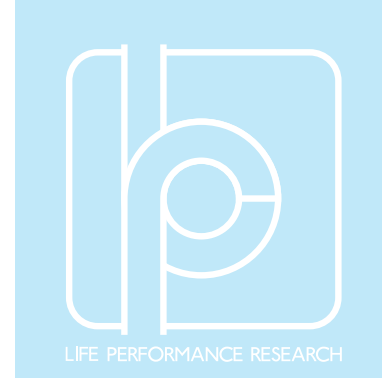
Key Features

- MEMS miniature inertial measurement unit (IMU)
- Integration of 3-axis gyroscope, accelerometer and magnetometer in one unit
- Real-time, on-device calculation of sensor orientation and linear acceleration
- Power Supply: 3.3~5.5V
- Interfaces: UART, I2C, SPI
- Size: PLCC-28 (12.0x12.0x2.6mm)

Applications

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



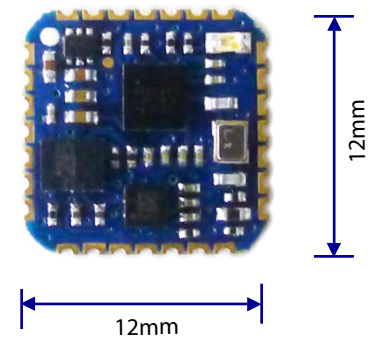


Sensor Specifications

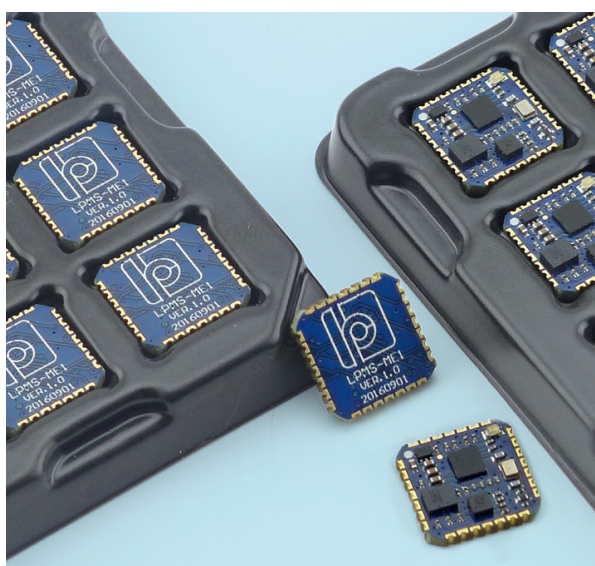
	LPMS-ME1
Size	12.0×12.0×2.6mm
Weight	0.3g
Orientation range	Roll: ±180°; Pitch: ±90°; Yaw: ±180°;
Resolution	<0. 01°
Accuracy	< 0.5°(static), < 2° RMS (dynamic)
Accelerometer	3-axis, ±2 / ± 4 / ± 8 / ± 16 g, 16 bits
Gyroscope	3-axis, ± 125 / ± 245 / ± 500 / ± 1000 / ± 2000 dps, 16 bits
Magnetometer	3-axis, ± 4 / ± 8 / ± 12 / ± 16 gauss, 16 bits
Data output format	Raw data / Euler angle / Quaternion
Power Consumption (100Hz, UART)	<20mA @ 3.3V
Power supply	3.3-5.5V DC
Temperature range	-40~+80°C
Interface	UART, I2C, SPI

Mechanical Drawing

LPMS-ME1:



LPMS-ME1 sensor



LpmsControl Utility Software

