

## SFM<sub>2</sub> 9 DOF IMU Brief

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The SFM2 is the smallest form-factor and lowest power wireless 9 DOF Sensor Fusion Module with optional Pressure, Temperature and Humidity sensors. The SFM2 offers both a Bluetooth Low Energy and a USB/COM port interface. The SFM2 provides an extremely flexible BLE and USB interfaces and allows complete customization of sensor output streams and sensor configurations. The SFM2 can easily be worn using the Velcro strap ran through slot in the bottom of the enclosure. **OEM CUSTOMIZABLE!!**



Shown with Black Enclosure. For other color options please inquire

### Product Highlights

- 40.9 x 28.1 x 14.3mm Form Factor
- Wearable: Enclosure has slot for Velcro strap.
- USB and BLE Interfaces
  - ❖ Firmware updates via BLE
- 9 DOF: 3-Axis Gyro, Accel, Mag
  - ❖ Optional Pressure, Temp, and Humidity
- Up to 833Hz Sensor Fusion Operation. Multiple Streams can be enabled at same time.
  - ❖ Tared & Un-Tared Quaternion Output
  - ❖ Fusion Compass Heading and Tilt Output
  - ❖ Fusion Linear Acceleration Output
  - ❖ Fusion Euler Angle Output
- Sensor Fusion Output via BLE or USB Interface
  - ❖ 833, 417, 208, 104, 52, 26Hz ODR Rate Selections
- Raw Sensor Output availability for all sensors up to 1667Hz ODR.
- USB(1Mbps) and BLE Interfaces
- iOS and Android App for sensor and data output configuration.
- USB/COM ASCII Command set for SFM2 configuration
  - ❖ Python API Library for easy configuration.
  - ❖ Binary Output option to maximize throughput
- TARE function to zero orientation for quaternion output.
- GLOBAL REFERENCE enable/disable command
- TIMESTAMP data with 25us resolution and user definable OFFSET for multiple SFM2 synchronization.
- Rechargeable Battery ( typical 250mAh)
  - ❖ ~156hour battery life with Quaternion output @ 26Hz using BLE interface
  - ❖ ~100hour battery life with Quaternion output @ 104Hz using BLE interface
  - ❖ ~58hour battery life with Quaternion output @417Hz using BLE interface
- Individual Control of BLE Output/Notification for every Sensor Output
  - ❖ Every Sensor Output has its own characteristic/Notification
  - ❖ Sensors and Sensor Fusion can be completely customized including Sensor Filters.
- Custom OEM/Logo Enclosure, customized PCB, Firmware, Mobile App, etc
- High Volume Pricing please inquire at [sales@sensormaestros.com](mailto:sales@sensormaestros.com)