



# ***axiamo***

motion that matters



Professional multisports motion sensor

# Description

The Axiamote is a cutting edge inertial sensor developed for sports applications. Main features are the measurement of 11 physical dimensions and flexible networking capabilities and its miniature size and weight. The user interacts with the system through mobile devices as smartphones or tablets providing raw motion data stream and specific features in real time.

## Features

The Axiamote sensor features flexible raw motion data sensing capabilities as well as a scientifically validated sprint algorithm in one device. All data measured by the Axiamote can be visualized directly in the mobile app and exported to standard CSV and Matlab formats.

### Raw Motion Data Sensor

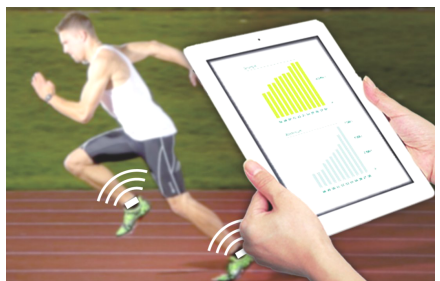
- ▶ Synchronous sampling from multiple sensor nodes
- ▶ 3D raw data of acceleration, rotation and orientation
- ▶ Temperature and ambient air pressure (altitude over sea level)

### GCT Sensor for Sprinting

- ▶ GCT (ground contact time) measurement for elite sprint training
- ▶ Synchronous measurement of both feet
- ▶ Display of left and right GCT as bar plots



Axiamo software is multiplatform



Axiamo Sprint Application

# Technical Specifications

Physical	
Size	34mm x 24mm x 7mm
Weight	9g
Fixation	Velcro strap included
Sensors	
Acceleration	±16 g Full Scale Range
Gyroscope	±2000 °/s Full Scale Range
Magnetometer	±4800 µT Full Scale Range
Barometer	10 - 2000 mbar, 0.016 mbar Resolution
Temperature	Ambient temperature, 0.1 °C Resolution
Sample rates	up to 4 kHz Raw Data
Features	
User profiles	Support for multiple athletes
Sensor network	Synchronous measuring from up to 8 sensors
Interfaces	
Bluetooth	2.3 (BT classic) and 4.0 (BT smart)
USB	2.0 supported
Peripheral	SPI, I <sup>2</sup> C, UART
Analog and Digital	3 programmable GPIOs
Performance	
CPU	ARM Cortex M3 @ 48 MHz
Memory	1 GByte Flash
Battery	120 mAh rechargeable Li-Ion
Software support	
Windows	Windows 7 or better (64bit)
Linux	Ubuntu or Debian with Kernel 2.6 or better
Android	Android 2.3 or better

# Team & Contact

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Firmware development

Front end design

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