



# SABEL

enabling technologies for sport & health

# SENSE

## Wireless MEMS Inertial Sensor

SABEL Sense is a wearable inertial sensor developed within the laboratory. The sensor collects data from digital MEMS inertial sensors (*accelerometer, gyroscope*) and a digital magnetometer.

Users have the freedom to move outside the lab environment both indoors and outdoors thanks to data being stored locally on the SABEL Sense sensor, and controlled wirelessly from you PC using a comprehensive MATLAB Toolkit. This allows for easy control of multiple sensors, providing no restrictions during data capture.

The flexibility of the Sensor allows it to be used in many applications, such as: Rehabilitation, Human movement / Biomechanical studies, etc.

The Sensor also has the flexibility to be customised to suit specific users requirements. With all development done in-house, modifications and advice can be provided quickly and accurately.



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## Specifications

### Dimensions

55mm x 30mm x 13mm (L x W x H)

### Weight

23g

### Wireless

ISM 2.4GHz

### Power

High density Lithium polymer battery  
~3Hrs of continuous use

### Sensors

3D Accelerometer

3D Gyroscope

3D Magnetometer (Digital compass)

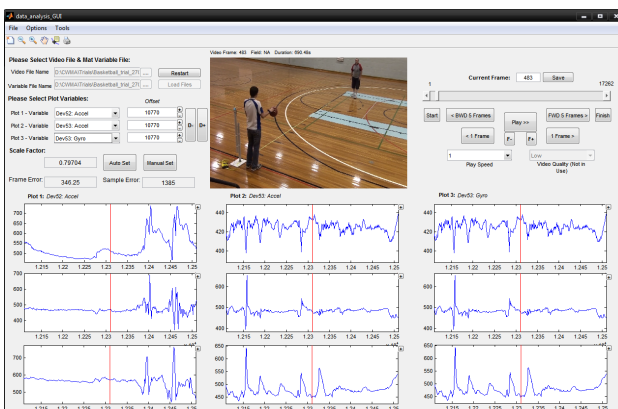
Temperature

### Storage

8GB Micro SD card

### Flexibility

Expandable daughter board



## Comprehensive MATLAB Toolkit

- Wireless control of sensors
- Sensor information
- Sensor -> Sensor synchronisation
- Sensor -> Video synchronisation
- Analysis of sensor data
- Real-Time streaming
- Sensor calibration

