

## Wearable sensors for Applied Research





### THE RESEARCH CHALLENGE

Wearable sensors have the potential to revolutionize clinical trials and clinical research in general by replacing sporadic and often subjective measures with continuous, objective measures. To achieve this potential, researchers need the tools that provide the capability of continuous raw sensor data, that they can integrate to allow the development of functions such as programming and data retrieval

### VERISENSE IMU (MOTION)

Verisense sensors are designed specifically to meet the challenges of clinical and applied research. The Verisense sensor range provides continuous collection of raw 3-axis accelerometer and/or gyroscope data. The progress of the data collection can be monitored continually with different integration options via API's or Bluetooth commands.

### KEY BENEFITS

-  Extended battery life  
\* Battery life configuration dependent
-  Continuous raw data
-  Flexible styling options
-  24x7 data coverage
-  Lightweight

### TECHNICAL SPECIFICATIONS

Accelerometer	Sample Rate: 12.5Hz, 25Hz, 50Hz, Range: $\pm 2g$ , $\pm 4g$ , $\pm 8g$ , $\pm 16g$
Gyroscope	Sample Rate: 12.5Hz, 26Hz, 52Hz, Range: $\pm 125/\pm 250/\pm 500/\pm 1000/\pm 2000$ dps
Storage	Up to 40 days at 25Hz Accelerometer
Water resistant	IP67 - not recommended in shower
Size	35mm x 43mm x 12mm
Weight	29.6 grams (1 ounce)
Connectivity	Bluetooth 5, Configurable upload interval
Compliance	ISO13485:2016, CE Certified Class I Medical Device
Future sensor capabilities	ECG, EMG, Bioimpedance. PPG & GSR available

### INTEGRATION OPTIONS

Develop functions such as:  
Programming & data retrieval via C# BLE API & MATLAB examples  
Also via Bluetooth Commands

