

# MOVIT SYSTEM

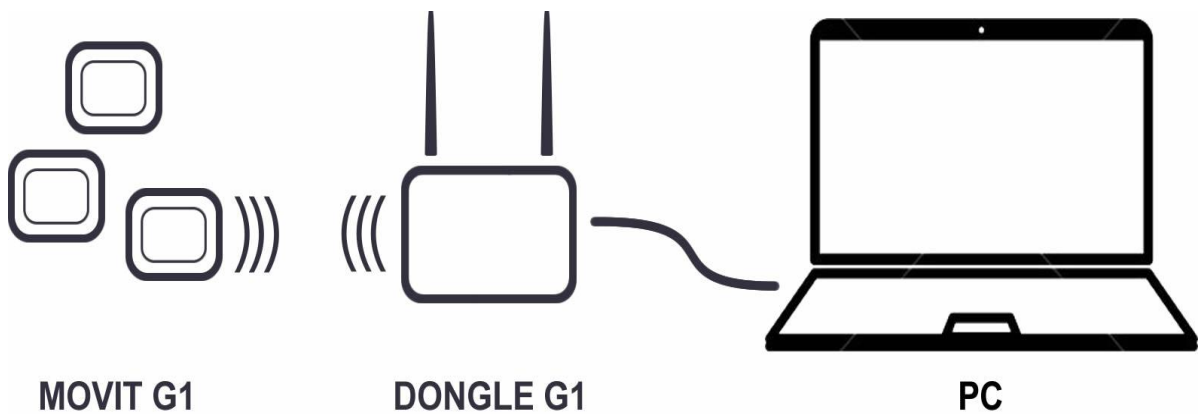
## Wearable inertial motion capture system



3D EDITION

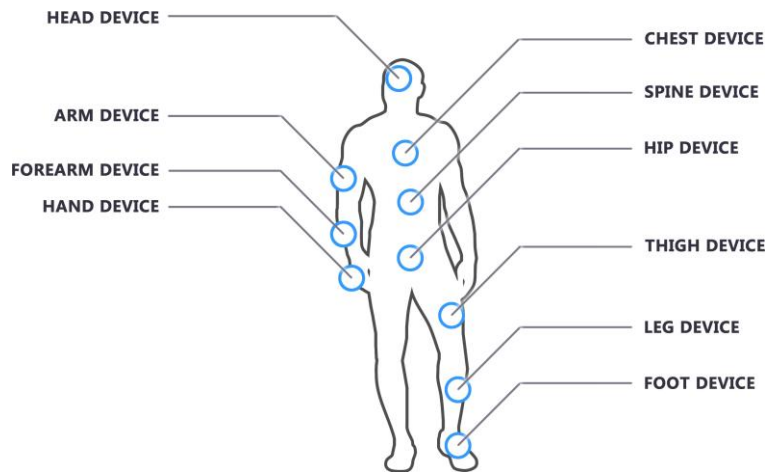
### The system

Movit System G1 is a wearable wireless system for Motion Capture and Motion Analysis. The system is composed by wireless wearable small inertial devices and an usb wireless receiver. You can use the system indoor and outdoor. No light or environmental limits. The inertial devices are called Movit G1 and the receiver is the Dongle G1.



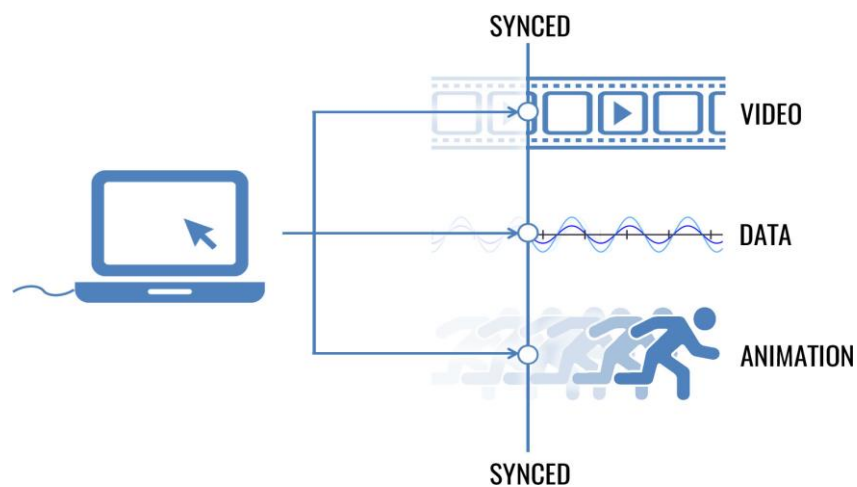
### Positions

Each device is designed to be universal and you can use Movit G1 devices on your principal body parts. Through wearable supports and a quick coupling/release system you can easily wear devices.



## Outcomes

The systems give you the following outcomes: raw data, animation file and a video file. Each output can be selected or deselected. Raw data: are accelerometer, gyroscope, magnetometer, quaternion and barometer values. The recorded animation is a standard BVH file. The video is a standard video file. All information is synced.



## Usage

The system is designed to be really easy to use, with a short setup and a fast calibration. In this video you can see the easy way to use the system. Wear the elastic bands on your body parts you are interested to measure. Apply the plastic support, called dock, with the velcro. Mount the device Movit G1 into the dock by the quick coupling system. You are ready to start... Do you need animation file also? OK. Rest few seconds in the standard T position and start the software calibration.

# Unique Features of **Movit System G1 - 3D Edition**

System unique features and competitive advantages

## **Wireless**

Complete wireless system: no wires. Each module is wireless and universal.

## **Wearable**

No external infrastructure required. Indoor and outdoor operativity.

## **Video**

Possibility to record a video stream.

## **Easy**

Easy to wear, easy to set up, easy to use. Wear the elastic support, couple the devices and ... Movit

## **Fast**

Fast calibration and rapid set up. Drag & Drop software association between devices and body parts. Quick calibration... and Ready to use

## **Sync**

Synchronized data. All output information are synced.

## **Memory**

No data loss with the internal memory. Record into the internal memory and download data after the recording session.

## **Data**

Several outcomes from the system: raw data, animation file, video file.

## **Battery**

Long life battery. More than 8 hours of operation time.



## Movit System G1 Technical Specifications

System unique features and competitive advantages

### Sensors

|                  | Gyroscope        | Accelerometer                      | Compass            | Barometer     |
|------------------|------------------|------------------------------------|--------------------|---------------|
|                  | angular velocity | acceleration                       | magnetic field     | pressure      |
| Axes             | 3 axes           | 3 axes                             | 3 axes             | -             |
| Full Scale Range | $\pm 2000$ dps   | $\pm 16$ g (156 m/s <sup>2</sup> ) | $\pm 4800$ $\mu$ T | 300-1100 mBar |
| Resolution       | 16 bits          | 16 bits                            | 14 bits            | -             |
| Sensitivity      | 16.4 LSB/dps     | 2048 LSB/g                         | 0.6 $\mu$ T/LSB    | -             |
| Sample Rate      | 4 to 200 Hz      | 4 to 200 Hz                        | 4 to 50 Hz         | -             |

### Hardware

|                |                                       |
|----------------|---------------------------------------|
| Dimensions     | 48 x 39 x 18 mm                       |
| Weight         | 40 grams (including battery)          |
| Battery life   | ~6 hours (~4 hours charging time)     |
| Material       | Acrylonitrile Butadiene Styrene (ABS) |
| Recording time | ~3 hours (at 100 Hz)                  |

Download the "Movit System G1 - Technical Specifications" document [here](#).



## Kit 05

|                |                                  |
|----------------|----------------------------------|
| Product:       | Movit System G1                  |
| Version:       | 3D Edition 05                    |
| Body:          | Partial                          |
| Devices:       | 5 Movit G1                       |
| Receivers:     | 1 Dongle G1                      |
| Wearab. Supp.: | 5 Bands (2 S, 2 M, 1 L)          |
| Software       | Motion Studio<br>Motion Analyzer |



## Kit 08

- Half Body
- 

|                |                                  |
|----------------|----------------------------------|
| Product:       | Movit System G1                  |
| Version:       | 3D Edition 08                    |
| Body:          | Half                             |
| Devices:       | 8 Movit G1                       |
| Receivers:     | 1 Dongle G1                      |
| Wearab. Supp.: | 7 Bands + 1 Chest                |
| Software       | Motion Studio<br>Motion Analyzer |



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## Kit 16

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|                |                                  |
|----------------|----------------------------------|
| Product:       | Movit System G1                  |
| Version:       | 3D Edition 16                    |
| Body:          | Full                             |
| Devices:       | 16 Movit G1                      |
| Receivers:     | 1 Dongle G1                      |
| Wearab. Supp.: | 15 Bands + 1 Chest               |
| Software       | Motion Studio<br>Motion Analyzer |