

Accelerometer (ACC) Assembled Sensor Data Sheet

BUNDLE-ACC-UCE6-Z/XYZ
221220

SPECIFICATIONS

- > Pre-assembled Accelerometer (ACC) sensor Z or XYZ
- > Single cable connection (Z)

FEATURES

- > Allows basic ACC data acquisition for one (Z) axis or three (XYZ) axes
- > Easy-to-use
- > Plug & play design
- > Raw data acquisition

APPLICATIONS

- > Activity monitoring
- > Tilt detection
- > Vibration measurement
- > Human-Computer Interaction
- > Robotics & Cybernetics
- > Biomechanics
- > Biomedical devices prototyping

GENERAL DESCRIPTION

The BITalino assembled ACC sensor is designed for everyone who wants to measure movements by evaluating Accelerometer (ACC) signals. This bundle is completely assembled with our 3D Printed Casing for BITalino (r)evolution Plugged making it more convenient to use, wearable, sharable & transportable. The Assembled Accelerometer (ACC) Sensors allow repeatedly accurate & fast measurements, once the user can benefit from the single cable connection for Z axis or the three cable connection for XYZ axes.



Fig. 1. Assembled ACC sensor – Z (left) and XYZ (right).

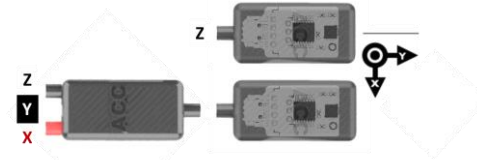


Fig. 2. Assembled ACC sensor – Z (upper) and XYZ (lower) with color coding for the cables according to each axis.

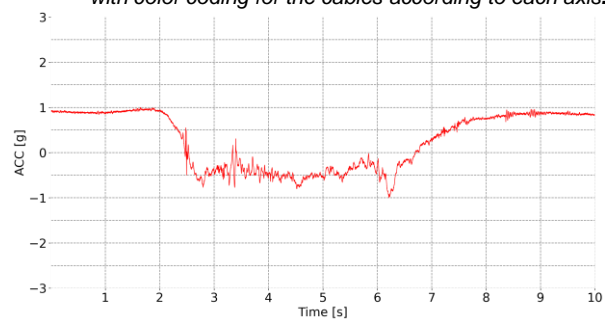


Fig. 3. Typical raw ACC (Z) data (acquired with BITalino (r)evolution) performing a burpee with push up starting and ending in a standing position with sensor placed on the chest.



Fig. 4. Example placement of the assembled version (Z) fixed with a strap on the chest.

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BEWARE: DIRECT OR INDIRECT COUPLING TO THE MAINS MAY RESULT IN SHOCKING HAZARD



Accelerometer (ACC)

Assembled Sensor Data Sheet

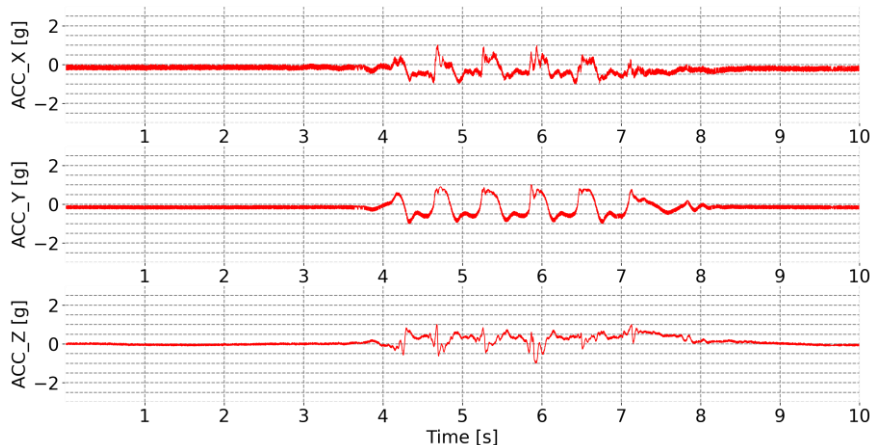


Fig. 5. Signal Sample of ACC (XYZ) with sensor placed on the chest and fixed with a strap and performing five consecutive jumps in Y-direction.

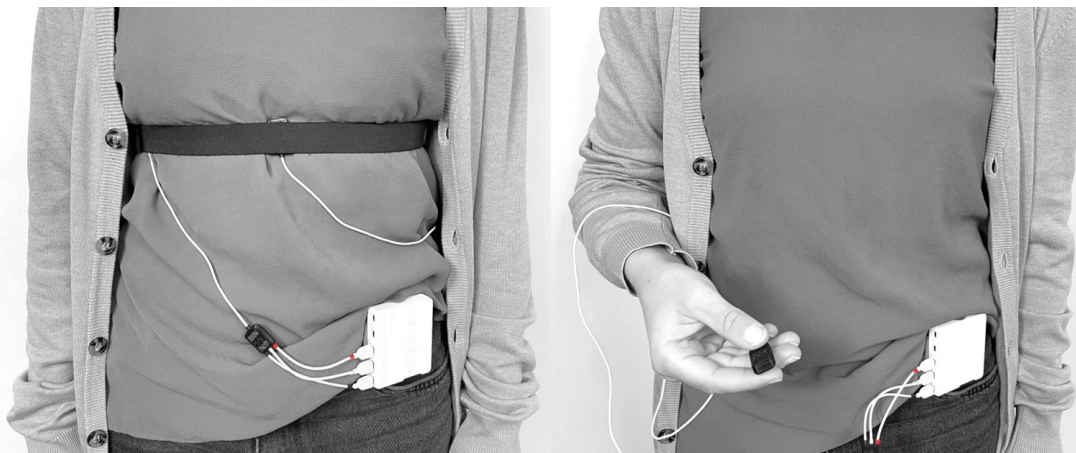


Fig. 6. Example placement of the Sensor (XYZ) fixed with a strap on the chest (left) or hold in the hand (right) with X-axis in channel A3 (red), Y-axis in channel A2 (white) and Z-axis in channel A1 (black).

TRANSFER FUNCTION

[ACC datasheet](#)

PHYSICAL CHARACTERISTICS

[ACC datasheet](#)

PACKAGING

Weight: 9 g (Z)

ORDERING GUIDE

Part #	Description
BUNDLE-ACC-UCE6-Z	The assembled version of a 3-axis accelerometer for motion measurement. This sensor is assembled with a 3D printed casing. Only the Z-axis is connected. Nevertheless, the user can choose to connect the X- and Y-axis following the procedure referred to in the datasheet.
BUNDLE-ACC-UCE6-XYZ	The assembled version of a 3-axis accelerometer for motion measurement. This sensor is assembled with a 3D printed casing. In this version, the XYZ-axis are connected and ready to be used.