

WAX3

3-Axis Wireless Accelerometer

Description:

The WAX3 is a three axis wireless accelerometer. It combines a state of the art triple axis accelerometer sensor with an ultra low power IEEE802.15.4 2.4 GHz band. The device also integrates a USB 2.0 enabled microcontroller and micro USB connector along with an on-board rechargeable power source. This enables the device to behave as a receiver or transmitter and facilitates easy charging and reconfiguration using the boot-loader application. Additional functionality can be added using the available expansion port and open source code structure.

Summary:

- +/- 16g 3-axis accelerometer
- 4 mg resolution
- 25m range indoors
- USB 2.0 enabled
- Rechargeable Li-Polymer battery
- Fully re-configurable functionality
- Expansion port for other sensors
- Accelerometer rate up to 2 ks.sec⁻¹

Applications:

- Wireless sensing
- Remote control
- Activity monitoring
- Interactive Art

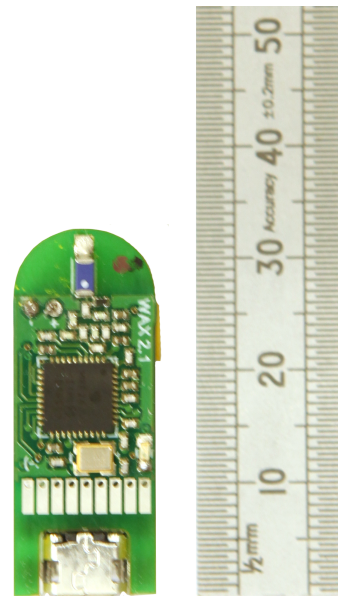
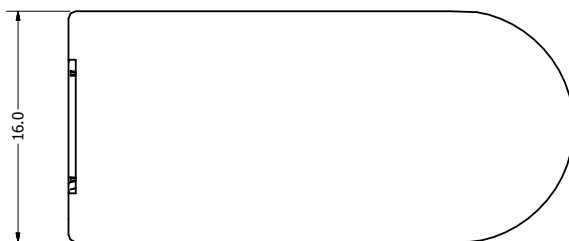
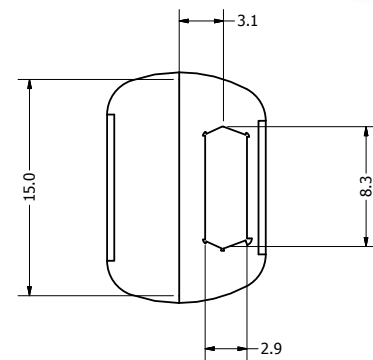
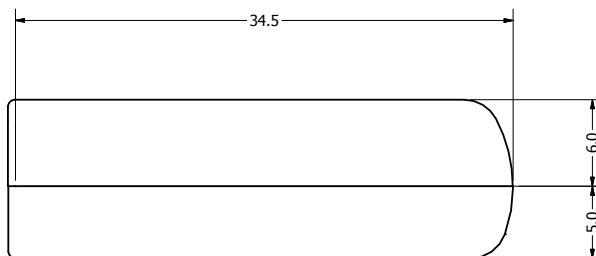
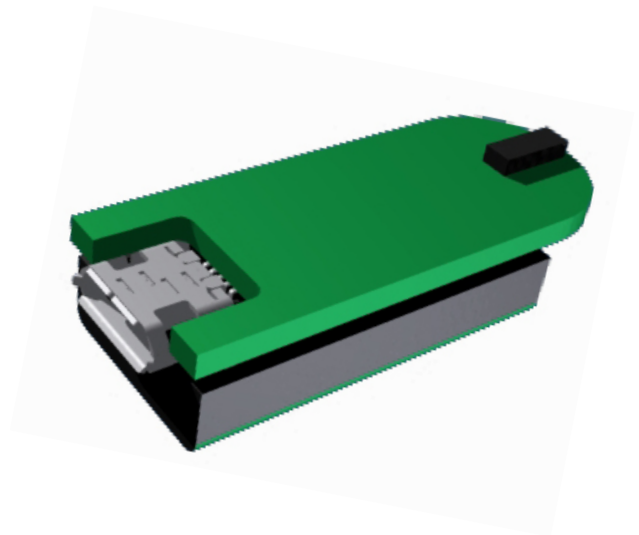
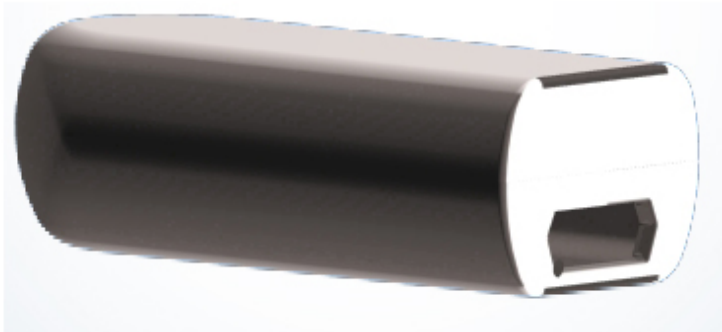


Figure 1. Picture of device

Advanced Specifications:



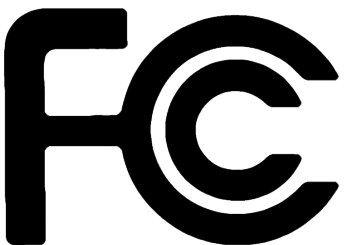
Parameter	Value	Notes
USB Connection	Full Speed	Several configuration options available, USB 2.0
Charge Current	100 mA	Current drawn from USB port
Battery Capacity	110 mAh	Lithium polymer technology
Battery life sleep	> 1.7 years	Shipping Mode
Battery endurance	500 cycles	Charge discharge cycles
Battery Transmitting	~10 hours	@50Hz continuous streaming
Battery Standby	~1 month	Device enters Standby automatically when not in use
Max survivable acceleration	10,000 g	Accelerometer sensor figure
Max sensed acceleration	+/- 16 g	Maximum deflection
Sensed acceleration resolution	4 mg	Minimum recorded deflection
Bandwidth RF	250 kbs ⁻¹	IEEE802.15.4 based radio
Transmit Power	0dBm	Configurable
Frequency	2.45Ghz	16 digital channels available
Connector used	Molex	USB Micro B
Weight	6g	Typical value

Dimensions:



Certification:

The WAX3 is certified to the following:

Certification	Test
	<p>The product is compliant with the Directive 2004/108/EC; the relevant Declaration of Conformity is available from Axivity</p> <p>The product has been tested to BS EN 61000-6-1 :2007 and BS EN 61000-6-3 :2007 (Electromagnetic compatibility (EMC), Generic standards, Immunity for residential, commercial and light-industrial environments).</p>
	<p>In accordance with the European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE), the product must not be disposed of in the normal unsorted municipal waste stream. Instead, it is the user's responsibility to dispose of this product by returning it to a collection point or directly to Axivity. Separate collection of this waste helps optimize the recovery and recycling of any reclaimable materials and also reduces the impact on human health and the environment. For more information concerning the correct disposal of this product, please contact your local authority or our issuing authority</p> <p>This product meets the minimum standards of the RoHS Directive 2002/95/EC</p> <p>The lithium polymer cell has met the acceptance criterion for the UN Recommendations on the Transport of Dangerous Goods relating to lithium batteries, reference Para 38.3 of Manual tests and Criteria document No. ST/SG/AC.10.11/Rev.4:2003</p>
	<p>This product complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept and interference received, including interference that may cause undesired operation.</p>

Disclaimers:

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