

# Battery Power Converter for Raspberry Pi

---

## Description

This small “bare board” module is a switch mode power converter based on the LM2576S-5.0 switching regulator is capable of delivering a stable 5 volts at up to 2 amps when connected to a suitable power source, such as a battery, with a voltage of between 8 and 30 volts. It is also capable of regulating an alternating voltage such as that from the secondary winding of a low voltage transformer. Again the input voltage to the module must be in the range of 8 to 30 volts.

## Use

**Note that the module will become very warm during use. This is normal, but care should be taken to place it on a suitable heat resistant and non-conductive surface. As with any electrical item of this type, the module should be located out of reach of unsupervised children.**

If fitting into an enclosure, proper ventilation must be ensured to prevent overheating

Connection of the power source to the module is by means of the screw terminal block. The orientation of the connecting wires is not important; due to the on-board rectifier, they may be connected either way round. The output of the module is via a standard USB Type ‘A’ socket. A low current LED is provided as a visual indication of the module being powered up.

Due to the efficiency of the regulator and the use of a low current LED, the current consumption of the module with no load is less than 8mA.

## Specification

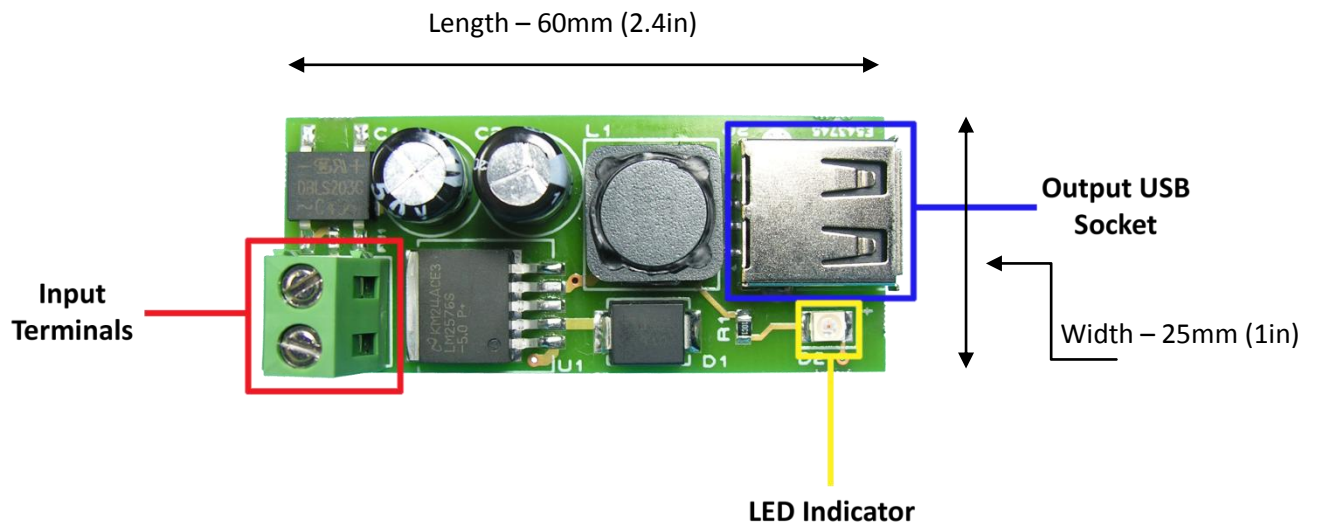
### Physical

- *Length* **60mm (2.4in)**
- *Width* **25mm (1in)**
- *Height* **20mm (0.8in)**

### Electrical

- *Input Voltage* **Min 8 - Max 30 Volts A.C. or D.C.**
- *Output Voltage* **5 Volts D.C.**
- *Output Current* **Max 2 Amps**
- *No-Load Current Drain* **Less than 8mA**

## Top view of module



*The Raspberry Pi name and the raspberry logo are trademarks of the Raspberry Pi Foundation.  
I have no affiliation with the Raspberry Pi Foundation.*

For further information or support for this module, please email [colin@circuitsurgery.co.uk](mailto:colin@circuitsurgery.co.uk)



© Circuit Surgery 2012. No part of this publication may be reproduced in any form, whether physically or electronically without prior written consent.