



This mini UPS provides 5V, 2A max. power to small computing devices like the Raspberry Pi or BeagleBoard. It features a micro USB connector for power input and a USB-A for power output. Signalling in and outputs as well as an auxiliary 5V output are provided via a 5 pin header and associated plug with screw terminals. A three position switch allows the UPS to be turned on, off or to run in programmable mode. In this mode the UPS can be switched off under control of a connected computer. The UPS features 4 signalling LEDs to indicate its status.

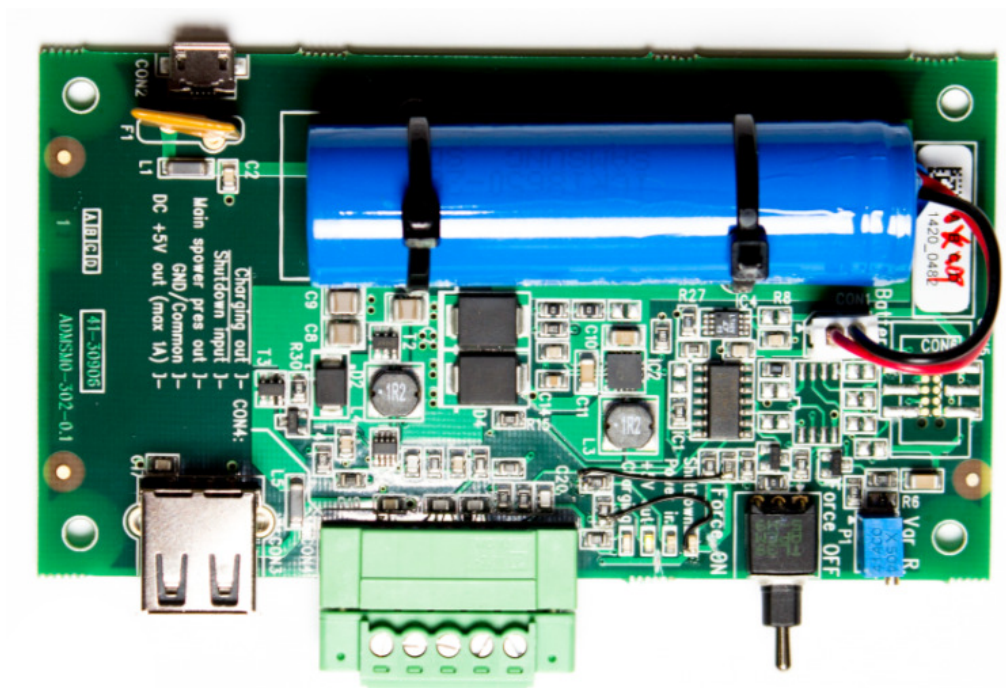
Although no ready made software is supplied with the device an application note is provided with a possible implementation of control software for a Raspberry Pi or other similar Linux small computing device

Mini 5V UPS board

Main features

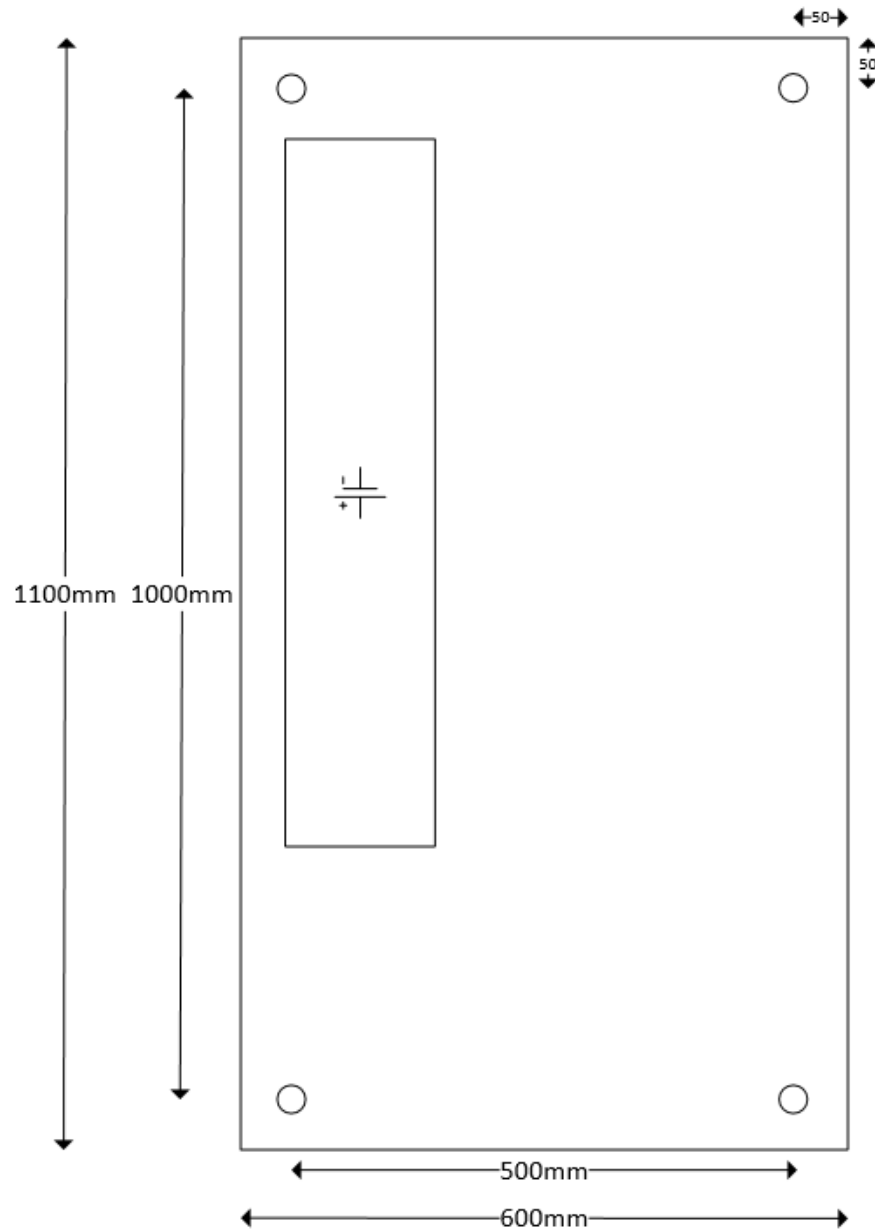
- 5 Volt input via micro USB connector
- 5 Volt output via USB-A connector
- 2800 mAh Li-ion battery
- High efficiency power conversion circuitry (>90%)
- Auxiliary 5V output
- Signalling to/from computer report status and turn off the UPS
- Signalling LEDs to indicate external power, battery charging,
- 2 years warranty on electronics and battery

Circuit board, top view



Mini 5V UPS board

Circuit board, physical dimensions



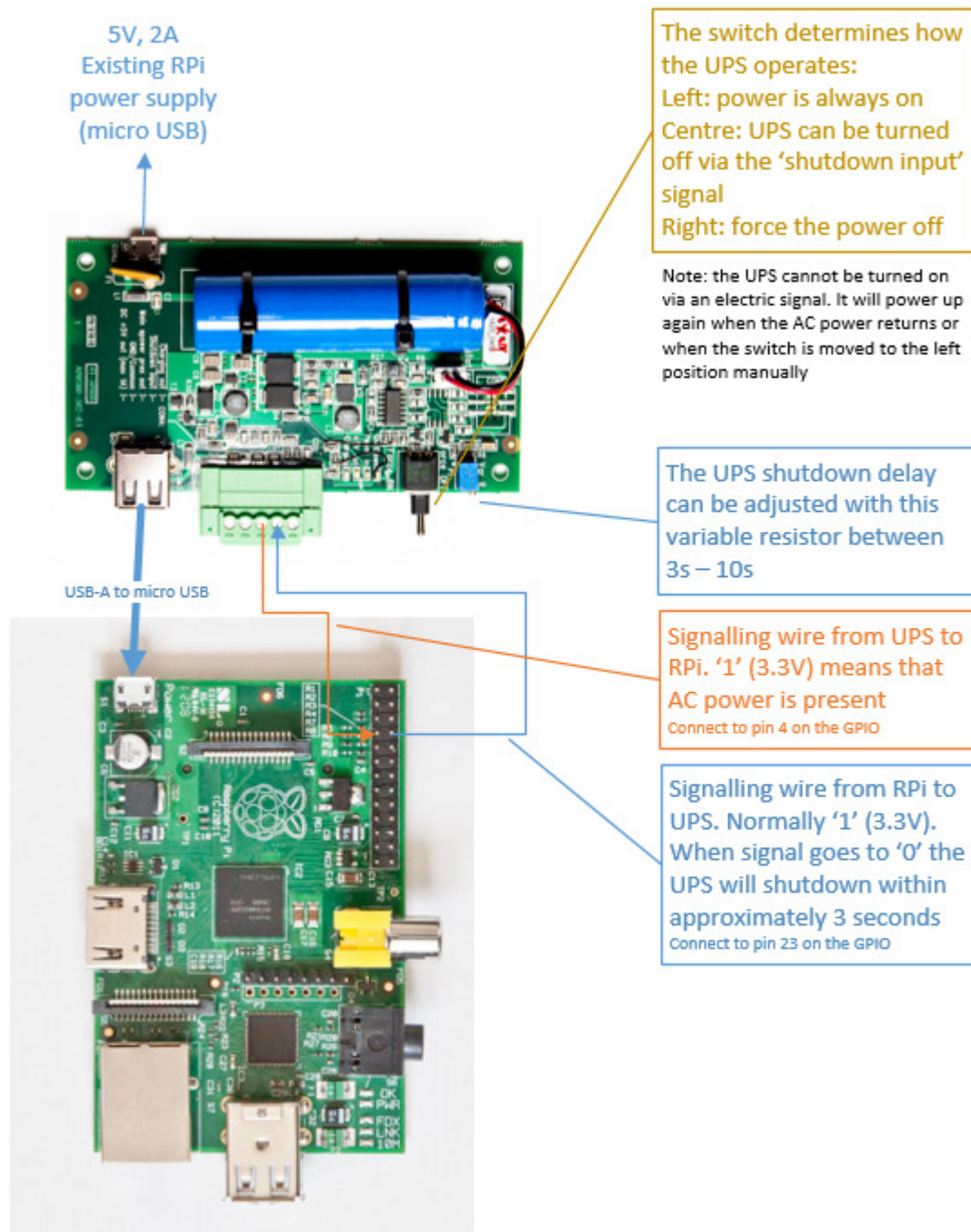
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UPS application example: Raspberry Pi connection diagram

The UPS is capable of powering a Raspberry Pi for several hours.

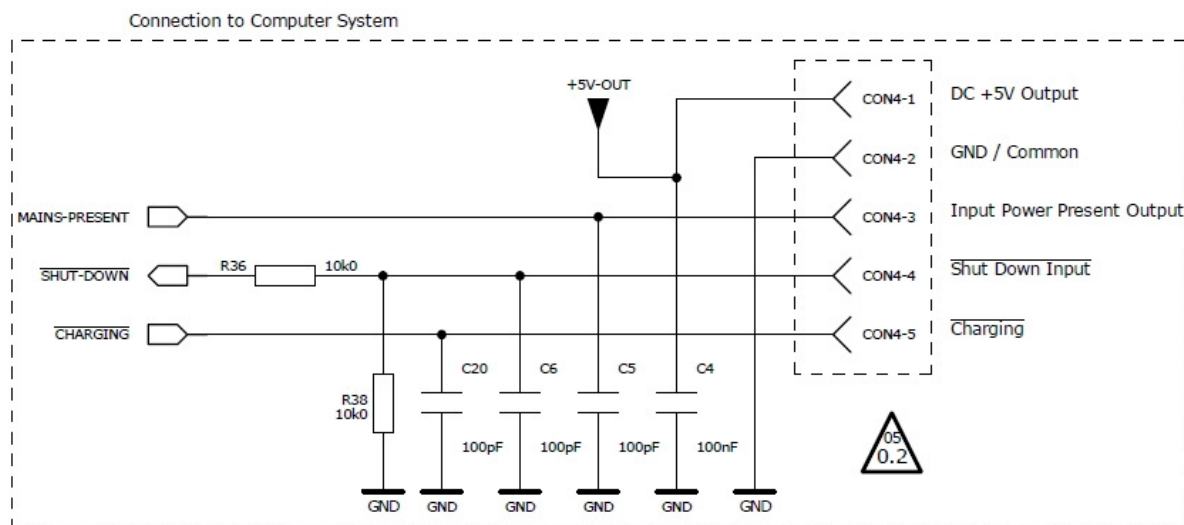
The following cables are required:

1. USB-A or other to micro USB (to power the UPS; not included)
2. 2 wire signalling cable (to interface to the board; included)
3. USB-A to micro USB cable (to power the RPi; not included, use existing power cable)



Mini 5V UPS board

UPS interface header pin-out



Product features

Output	
Power rating	10 W maximum
Nominal output voltage	5V
Output frequency	DC
Output connections	USB-A
Input	
Nominal input voltage	5V
Input connection	Micro USB
Batteries and runtime	
Battery type	Li-ion, 2800mAh
Typical backup time at 1/2 load (min.)	2h 30m
Typical backup time at full load (min.)	1h 15m
Communication and management	
Interface ports	1 5pin header with screw terminals (5V out, ground, signalling in, signalling out, charging indicator out)
Physical	
Maximum height (RM)	23 mm
Maximum width (RM)	110 mm
Maximum depth (RM)	60 mm
Net weight	82g
Warranty	2 year electronics and battery