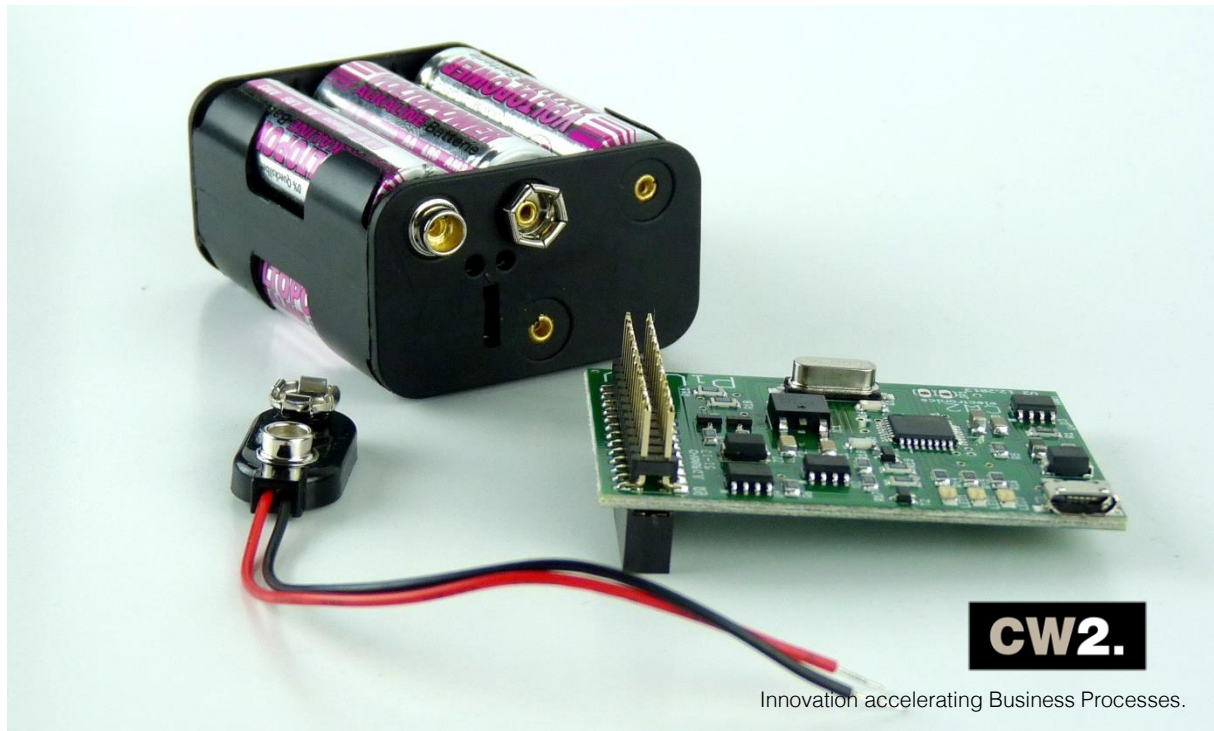




Data Specification

Pi UPS (Uninterruptible Power Supply)

How it works

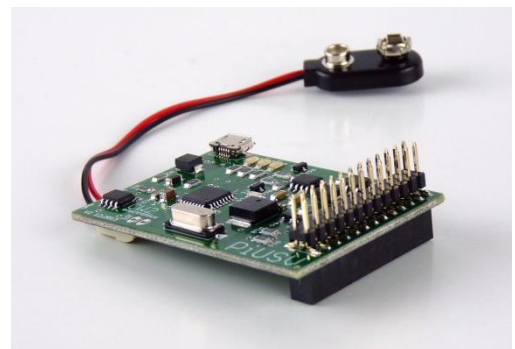
The Pi UPS is a small circuit board with a battery pack (batteries not included) to prevent voltage cut-outs of the Raspberry Pi mini-computer. Commercial rollout is December the 23rd, 2013. A small piece of software developed at CW2. for bringing the Pi UPS into service very easily will be available as download.

Technical Data

- ~ Classification after IEC 62040-3: Class 1, part 3, which means that as soon as voltage gaps happen, the UPS switches to batteries. No recharge feature implemented.
- ~ Primary voltage and battery voltage: UP=5V (USB) => ~ Primary voltage: UP=5V (USB)
- ~ Allowed battery voltage: U SinMax=7.5V-12V
- ~ Maximum current with battery pack: I SoutMax=1,000mA
- ~ Pins for logical requests of primary voltage and battery status
- ~ Power supply for the Pi through GPIO, therefore no attachment to the Pi needed

Connections

- ~ IN1: Primary power supply through Micro USB
- ~ IN2: Secondary power supply through press-stud connection



LED states

- ~ LED1: All good, default state
- ~ LED2: Batteries weak or empty
- ~ LED3: Emergency mode, power supply through secondary power supply

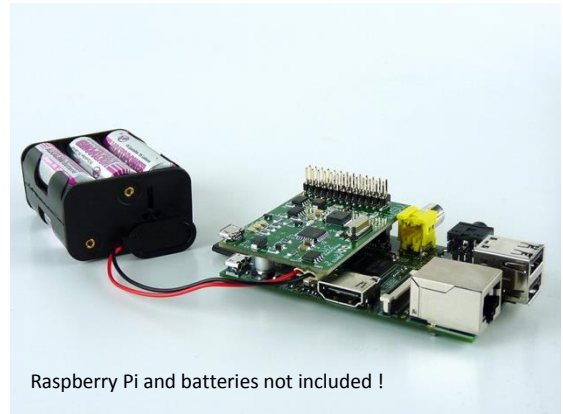


Diagram and GPIO

- ~ The Raspberry Pi is getting its current through the GPIO port. It is not planned to add another power supply to the Pi directly.
- ~ Communication between the operating system of the Pi and the Pi UPS goes through the integrated I²C bus (Pin3 and Pin5). Therefore all other ports are free to use. You should be able to use any other device or sensors on this I²C bus.

GPIO Port



Last modified

12/20/2013