



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# Wide Input SHIM

## Power your Pi with a wide range of input voltages from 3 to 16V!

Wide Input SHIM lets you use a range of different power supplies with your Pi, including the ubiquitous 12V barrel jack power supplies. It's super-skinny, so you can solder it straight to your Pi's pins and still use HATs and pHATs on top.

The barrel jack connector on Wide Input SHIM is a 3.5mm outer diameter (OD), 1.3mm inner diameter one, and there's a short male to female adapter cable included to allow you to use the common 5.5mm OD barrel jacks too.

There's also a short cable included with a 3.5mm OD barrel jack on one end and tinned wires on the other, in case you want to attach it directly to something like a bench power supply or to solder it into a project.

If you need a longer power cable, then there's a 1.5m long 3.5mm OD male to tinned wires cable available separately.

### Kit includes

- Wide Input SHIM
- 2x6 female header (**requires soldering**)
- 3.5mm OD male to 5.5mm OD female adapter cable (15cm long)
- 3.5mm OD male to tinned wires cable (15cm long)

## Features

- Super-small SHIM-format board
- 0.8mm thick PCB
- Can be used with HATs and pHATs
- 3.5mm outer diameter barrel jack connector (centre positive)
- Adapter cables included
- TPS63070 buck-boost converter chip (data sheet)
- 5V / up to 2A output
- 3-16V input
- Reverse voltage protection
- EN (enable) pin to switch off output voltage (pull to ground)
- **Requires soldering**

## Usage

You can supply a range input voltages to Wide Input SHIM, either through the centre positive 3.5mm outer diameter barrel jack connector, or through the two broken-out + and - pins on the SHIM.

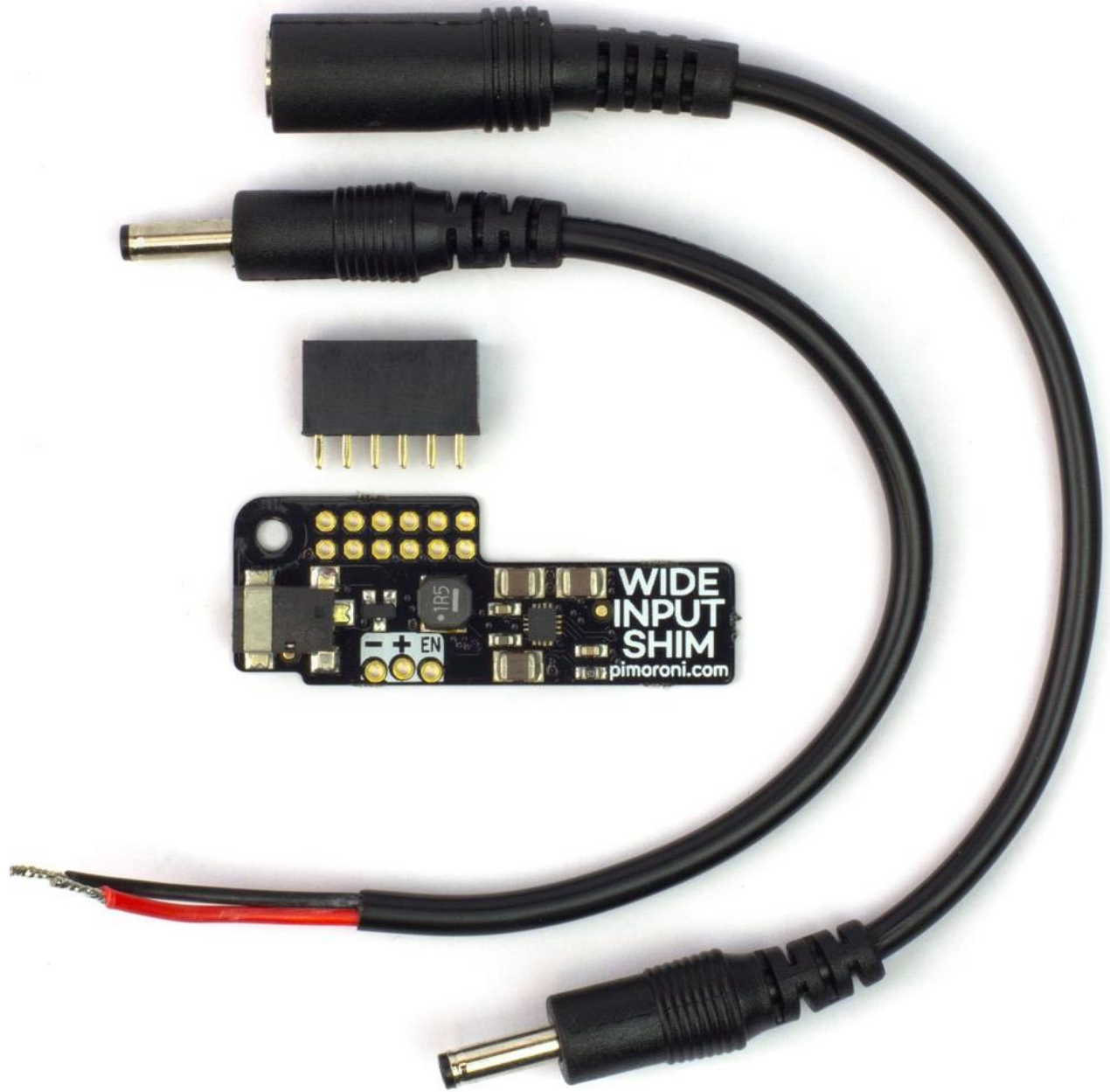
The board will provide 5V/2A output (through the GPIO to the Pi) at input voltages of 5V to 16V. Current drops to 1.5A at 4V, and 1A at 3V.

Pulling the EN (enable) pin to ground will cut the 5V voltage output, although it should be noted that you should shut your Pi down cleanly before doing this!

## Notes

- Dimensions: 45x17x6mm (LxBxH)
- **Using both micro-USB power and Wide Input SHIM power at the same time is not recommended with Pi Zero / W where there is no protection against back-powering**





Wide Input SHIM kit /PIM271



**1.5m long power cable /CAB1100**