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PowerPad15s

User guide v1

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Introduction

The PowerPad15s is a device used to charge and synchronise (sync) data across 15 USB devices simultaneously. It's a compact and safe device suited to home and office use. The PowerPad15s detects and adapts to connected devices ensuring that each device is charged at the optimum rate. It also offers outstanding data transfer reliability and speed.

The PowerPad15s is a universal charger and can emulate manufacturer chargers automatically as necessary.

The PowerPad15 (both the charge-only and charge and sync variants) is a future-proof device and can charge all current USB chargeable devices. Future devices can be supported, as and when required, via firmware updates. Details covering how to update the firmware are available online at <u>cambrionix.com/updater</u>.
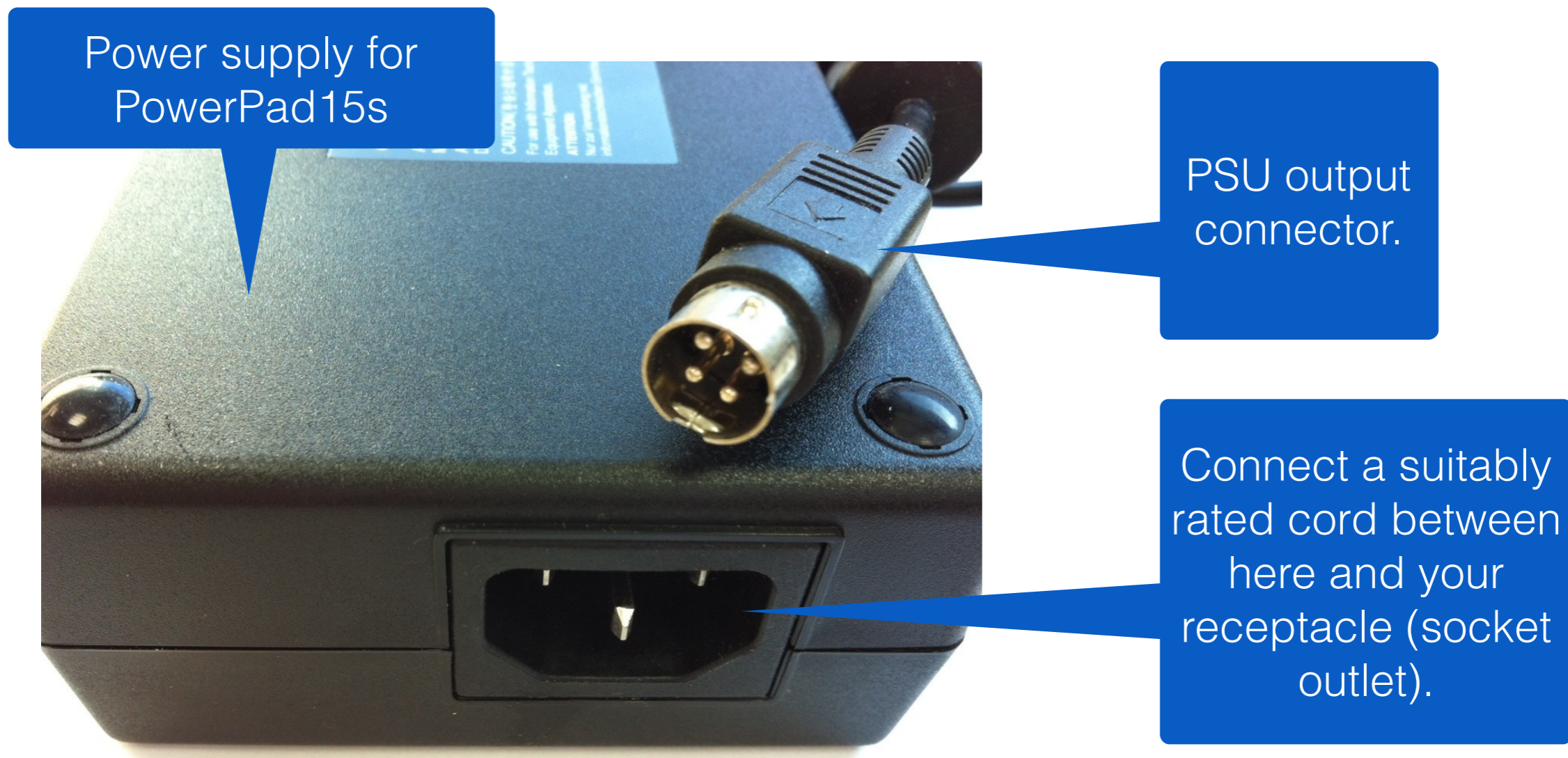
Note: If in any doubt about how to operate or install the PowerPad15c please contact Cambrionix Ltd at <u>support@cambrionix.com</u>

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Contents

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1. Operating

- Connect a suitable power cord between the power supply (PSU) and receptacle (socket outlet). The PSU is shown below.

Power supply for PowerPad15s

PSU output connector.

Connect a suitably rated cord between here and your receptacle (socket outlet).

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1. Operating

• Connect the output of the power supply to the PowerPad15s.

Correctly fitted power connector.

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1. Operating

• Switch the PowerPad15s 'on' using the on/off switch as shown below. The red 'power LED' will illuminate when the PowerPad15s is switched 'on'. This LED may flicker or pulse depending on the level of activity within the PowerPad15s - this is entirely normal.

ON/OFF switch. Move this slide switch towards the power connector to switch the PowerPad15s 'ON'.

Red power LED.

Power connector.

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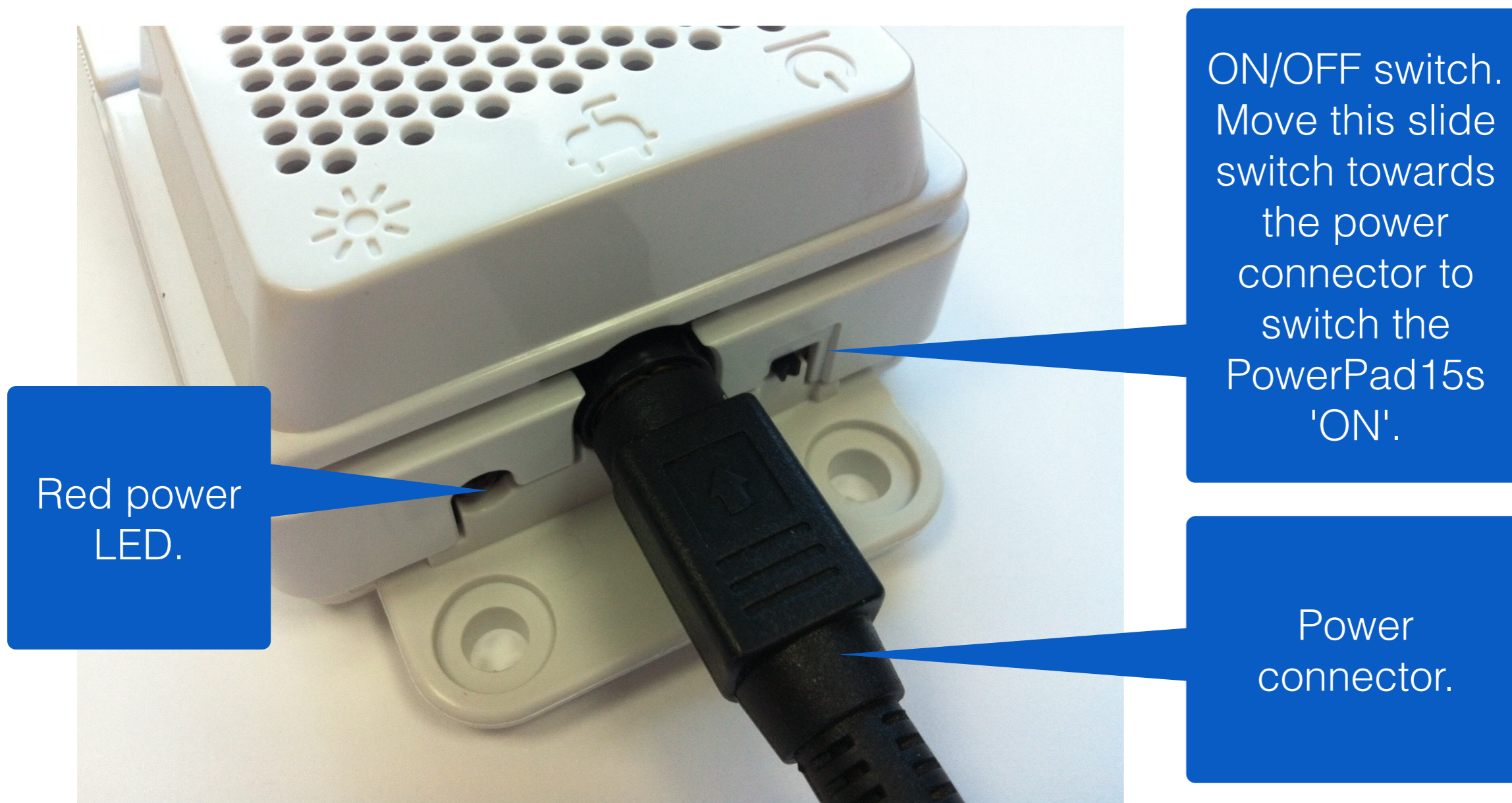
1. Operating

• Connect your USB devices to the PowerPad15s using suitable USB cables. These are normally supplied by the USB device manufacturer.

• With no host computer connected to the PowerPad15s the devices will all begin to charge. If you connect a host computer, all the devices will be placed in sync mode and will be visible within iTunes, Apple configurator or similar software.

• The switchover between charging mode and sync mode is automated and will change in response to a host either being connected or disconnected.

• It is also possible to leave the host connected and change the port activity via a terminal emulator or custom application. Please see section 3 for more details.

USB host cable connected to the host port on the PowerPad15s.

USB device cable connected to one of the 15 USB ports on the PowerPad15s.

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2. Installation

- The PowerPad15s can either be used on a desk/bench or mounted to a surface using the mounting holes on either end of the device. Under all mounting conditions it is essential to avoid covering/blocking the ventilation holes indicated below.

Ventilation holes.

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2. Installation

- To mount the PowerPad15s to a surface you will require four M5 screws (suitable for the material you are mounting the PowerPad15s to). You will also require a suitable tool for driving your chosen screws. Do not use countersunk head screws as these will damage the plastic flanges, we recommend a 'pan head' screw type.
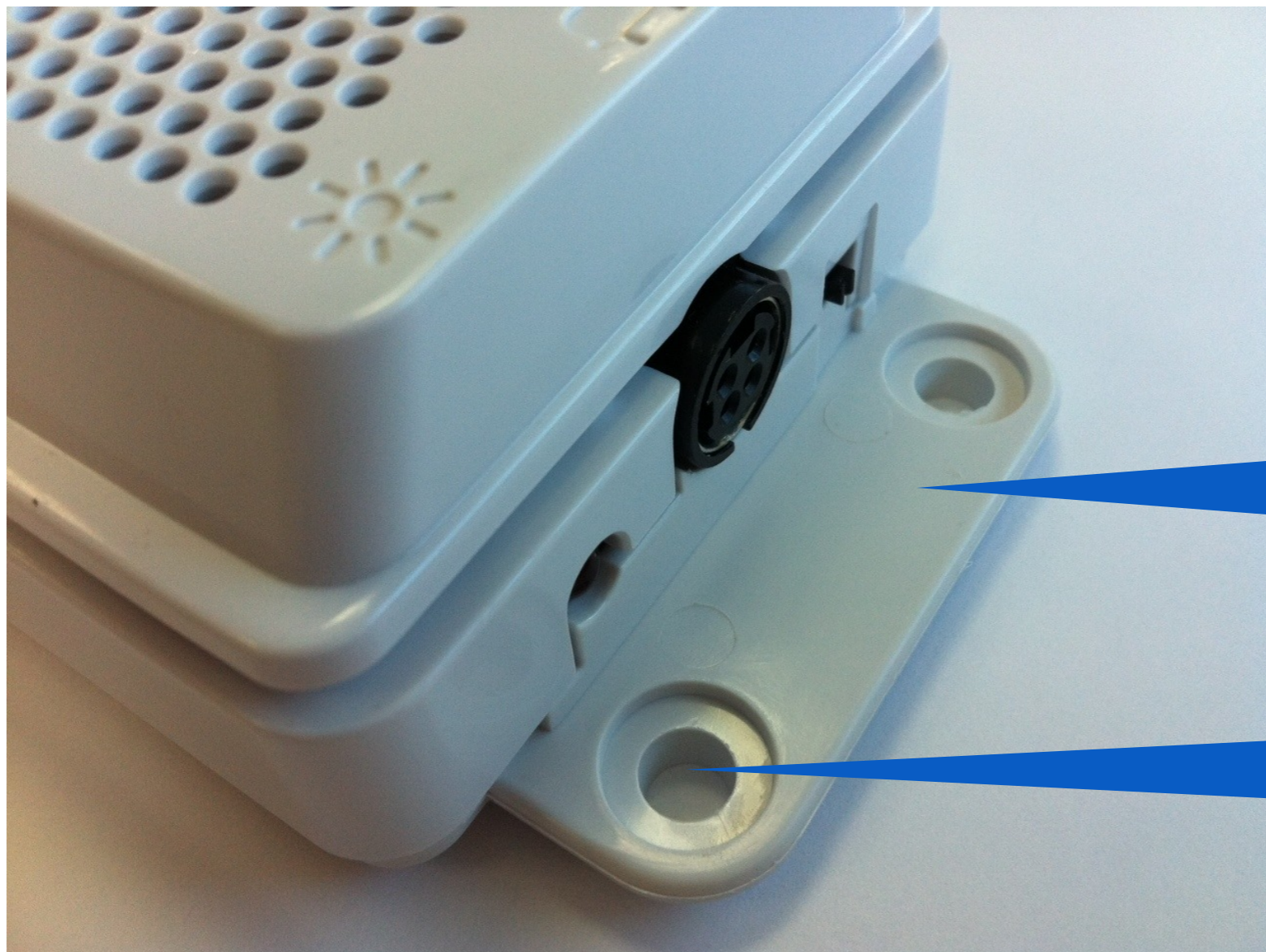
Mounting flange. There is a flange on either end of the PowerPad15s.

Holes suitable for an M5 screw.

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2. Installation

• The PowerPad15s dimensions and mounting hole locations are shown below.

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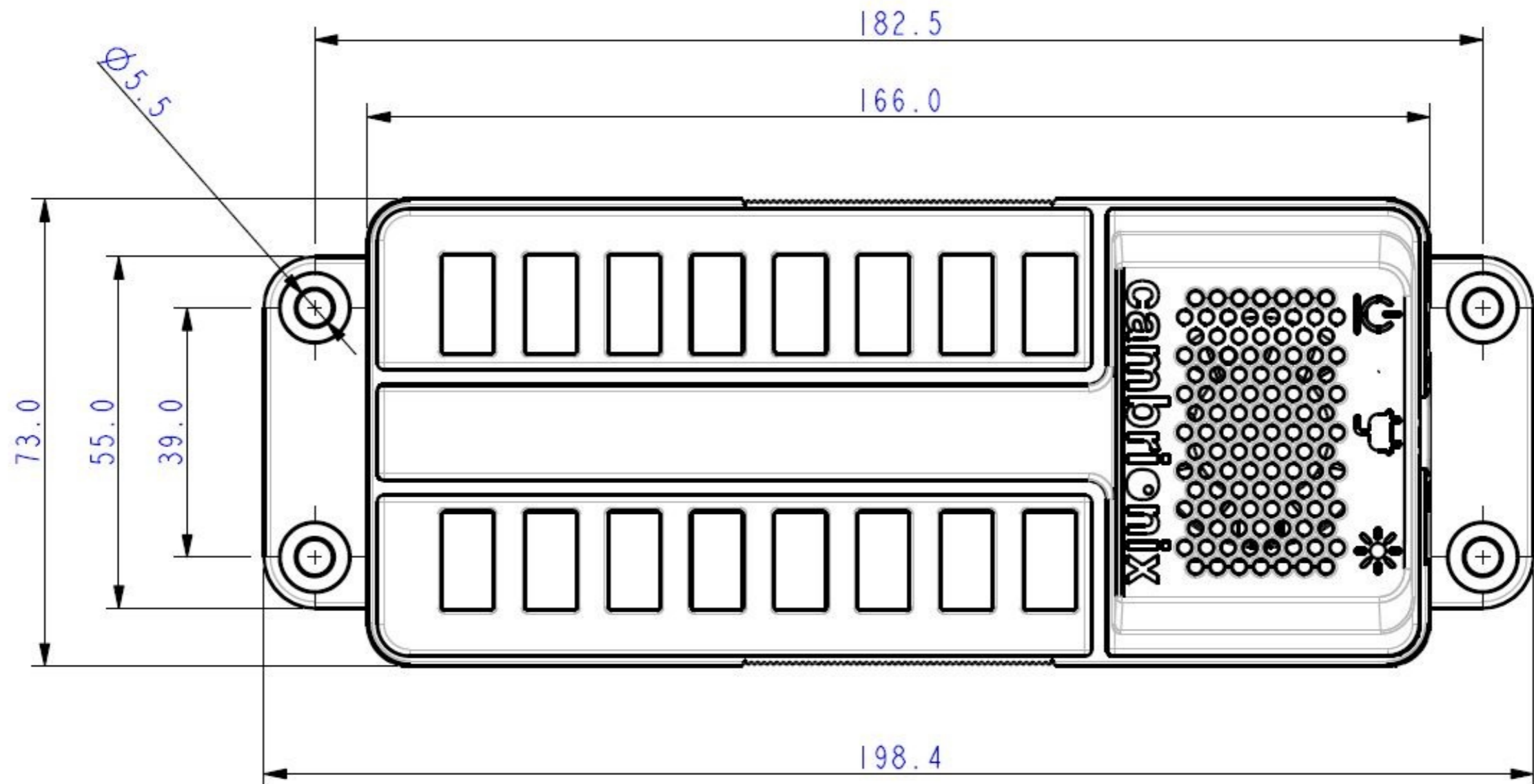
2. Installation

- The PowerPad15s can be mounted in a number of vertical orientations as shown below. The PowerPad15s can also be mounted horizontally to a flat surface such as a desk. Care should always be taken to ensure that the ventilation holes are not blocked or obstructed.

Vertical surface, power entry on right or left.
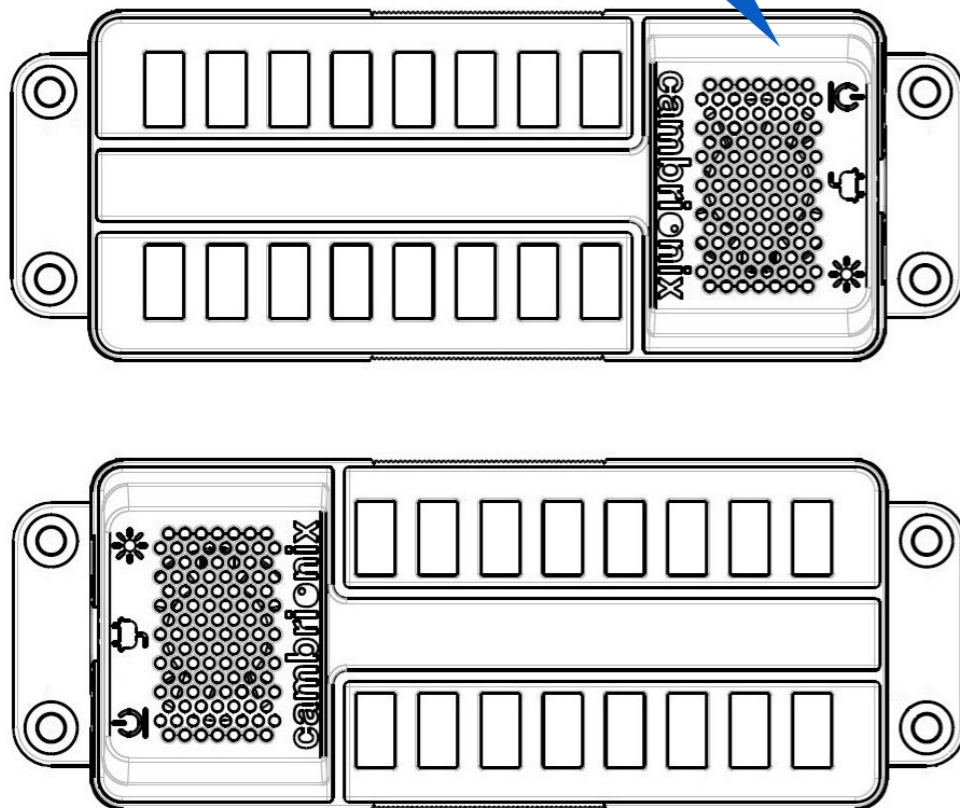
Vertical surface, power entry on top or bottom.

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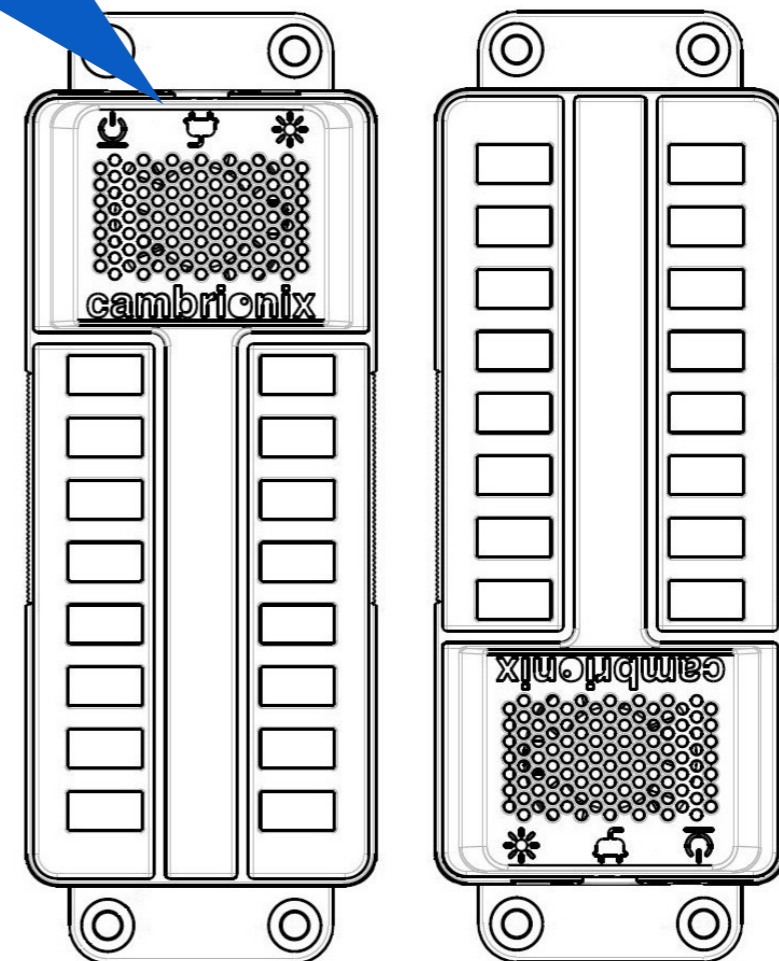
3. Port control and monitoring

- It is possible to control individual charging ports and also monitor the current on each port as well as total consumed power etc. In order to monitor and control the 15 charging ports a host computer connection is required.
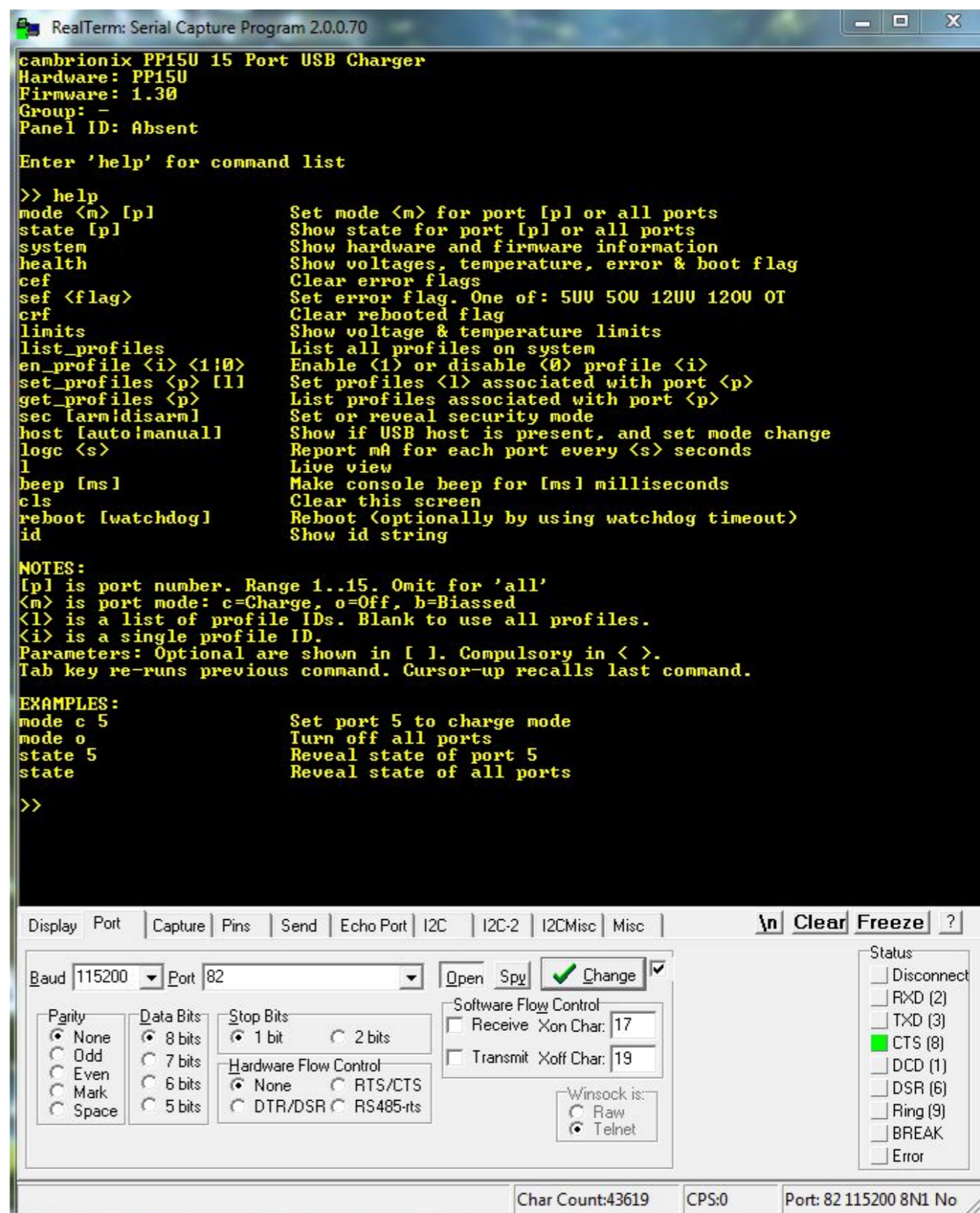
Connect the PowerPad15s 'Host Port' to a computer USB port using a USB A-A cable.

PowerPad15s Host Port.

3. Port control and monitoring

- Install the FTDI driver for your operating system from cambrionix.com/updater

- Open a terminal emulator (ZTerm, PuTTY etc) and connect to the PowerPad15s USB COM port with the following settings: 115,200 baud, 8N1.

- Press the ENTER key on your computer to bring up the PowerPad15s command prompt and type `help` to view a list of commands along with the syntax.

- Please contact support@cambrionix.com for detailed instructions.

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4. Safety messages

- Do not obstruct ventilation holes & slots.

- Do not spill liquids onto the unit.

- Failure to follow operating and installation instructions may result in unit failure.

- Do not attempt to modify or open the PowerPad15s enclosure.

- The plug on the power supply cord is considered the 'disconnect device' and as such the receptacle (socket outlet) should be located near the PowerPad15s and shall be easily accessible should the power supply need to be isolated from the 100-240VAC input for whatever reason.

- The power cord should not be attached to a building surface, nor run through walls, ceilings, floors and similar openings in the building structure.

- When installing the PowerPad15s measures must be taken to avoid physical damage to the power supply cord, including proper routing of the power supply cord and provision of a receptacle (socket outlet) near the PowerPad15s, or positioning the PowerPad15s near a receptacle (socket outlet).

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5. Electrical specifications of PSU if supplied.

Parameter	Specification	Notes
Part number	FSP180-AHAN1	Manufactured by FSP Group Inc.
PSU input voltage	100-240 VAC	50-60Hz
PSU input current	2.5A	
PSU output voltage	12 VDC	
PSU output current	15A	
Input connector	C14	
Output connector	4pin DIN	On the end of a 90cm cable.

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5. Electrical specifications of PowerPad15.

Parameter	Specification	Notes
Model number	PowerPad15s	Manufactured by Cambrionix Ltd.
Input voltage	12VDC	
Input current	15A	
Port output voltage	5.2VDC	Per port
PSU output current	2.1A	Per port
Power in connector	4pin DIN	See product label for pinout.
Output connectors	'USB A' Female	There are 15 output ports.
Operating temperature	5 to 35 deg C	

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6. Warranty

- The PowerPad15s is provided with a 12 month RTB warranty from date of purchase.

- Details of our standard warranty terms are available at www.cambrionix.com

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7. Contact details

- Address: Cambrionix Ltd, St Johns Innovation Centre, Cowley Road, Cambridge, CB4 0WS, UK.

- Telephone: +44 (0) 1223 422 249

- Email: support@cambrionix.com

- Web: www.cambrionix.com