

User Manual

PP15C



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2. Your PP15C at a glance

The PP15C has been designed primarily for desktop use, being highly compact and quiet. It provides 10W of charging power to each of its 15 x USB 2.0 Type-A ports, allowing mobile devices to be charged quickly, safely and reliably. All ports can be controlled using Cambrionix software to allow charging and/or data transfer while monitoring important port and device information.

The PP15C can charge attached USB devices without using a local computer and our intelligent charging algorithm allows almost any device to be charged at its optimum rate (up to 2.1A). The firmware can be up-dated to allow new charging profiles to be added, ensuring the PP15C can charge the latest devices. It is ready to charge out-of-the-box and to sync devices when attached to a host computer.

3.Safety

This user manual is for informational purposes only, it contains information for start-up and operation of this product. Note: the contents and the product described are subject to change without notice. To avoid injuries and damage observe the safety instructions of the user manual.

Understanding and observing the instructions in this user manual are prerequisites for hazard-free use and safety during operation. This user manual cannot cover all conceivable applications. If you would like additional information or if problems arise that are not sufficiently addressed in this manual please ask your distributor or contact us directly using the means preferred which are located on the back cover of this manual.

	 CAUTION
	<p>Personal Injury and Damage to the product</p> <ul style="list-style-type: none"> • Observe the safety instructions in this user manual

3.1.Signal word panel

Depending on the probability of serious consequences, potential dangers are identified with a signal word, the corresponding safety colour, and if appropriate, the safety alert symbol.

 CAUTION
<p>Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor (reversible) injury.</p>

CAUTION
<p>Indicates a potentially hazardous situation which, if not avoided, may result in damage to the product and/ or its functions or of a property in its proximity.</p>

3.2.Safety alert symbol



Use of the safety alert symbol indicates a risk of injury.

Observe all measures that are marked with the safety alert symbol in order to avoid injury

3.3.Pictograms

Warning Signs	
 Electrical hazard	 Fire Hazard
Mandatory action signs	
 Read operating instructions	 Mandatory regulation

3.4.Product modification

Cambrionix products are designed and manufactured to meet the requirements of UK and International safety regulations. Modifications to the product could affect safety and render the product non-compliant to relevant safety standards, which could result in injury or damage to the product.

	CAUTION
	<p>Electric shock or personal injury may occur</p> <ul style="list-style-type: none"> • Do not modify the product in any way • Do not dismantle the product

	⚠ CAUTION
	<p style="text-align: center;">Fire or personal injury may occur</p> <ul style="list-style-type: none"> • Do not obstruct air vents on the product • Do not cover the product in combustible material

	CAUTION
	<p style="text-align: center;">Damage to your product may occur</p> <ul style="list-style-type: none"> • Do not bend or compress any part of the product

3.5. Power supply

This section describes safety precautions you must follow when using the power supply.

	⚠ CAUTION
	<p style="text-align: center;">Electric shock or personal injury may occur</p> <ul style="list-style-type: none"> • Do not use a damaged power cord or plug, or a loose power socket • Do not touch the power plug with wet hands • Do not allow liquids to come into contact with the unit or power supply

	CAUTION
	<p style="text-align: center;">Damage to your product may occur</p> <ul style="list-style-type: none"> • Do not short circuit the Power Supply Unit (PSU) supplied with your product • Do not disconnect the power cord while the product is being used • Do not bend or pull the power cord with excessive force

3.6.Storage and Installation

This section describes safety precautions you must follow when installing and storing your PP15C.

	⚠ CAUTION
	<p style="text-align: center;">Electric shock or personal injury may occur</p> <ul style="list-style-type: none"> • Do not place the power cord near heat sources • Connect the plug to an earthed socket

	CAUTION
	<p style="text-align: center;">Damage to your Cambrionix product may occur</p> <ul style="list-style-type: none"> • Operate the product only in an environment where the ambient temperature is inside the operating temperature range • Operate the product only in an environment where the relative humidity is inside the operating range • Be careful not to leave the power cord underneath a heavy object

	⚠ CAUTION
	<p style="text-align: center;">Overheated power sockets may cause a fire</p> <ul style="list-style-type: none"> • Do not overload the power socket that your hub is connected to • Insert the power plug all the way into the socket so that it is not loose

4. Getting Started

4.1. What's Included

- 2m Mains power cable (Country specified on order)
- 0.8m USB 2.0 Type-A Updater Cable
- PP15C Hub
- Power Supply Unit

4.2. Connecting to the mains

Connect the Power Supply Unit (PSU) to the hub using the 4-pin DIN plug. Connect the power cable to the PSU. Making sure you adhere to local safety regulations, connect the power cable to the 100 – 250 VAC mains power outlet and switch the hub on using the small power switch located on the opposite side to the power input connector on the hub. When the device is switched on, a green LED will be illuminated. The hub is now ready to charge attached devices.

4.3. Connecting to Host

Once the power is connected connect the PP15C to your host system using a USB 2.0 Type-A cable, this is provided with your hub. Using an incorrect host cable may result in the hub and all subsequent ports not being recognised by your host.

4.4. Previous versions of Windows

If you are using a version of Microsoft Windows™ prior to Microsoft Windows 10™ you will need to install Cambrionix CDC drivers for enabling the full functionality of the hub. To install the drivers please detach the hub from the PC before executing the downloaded installer. Once the installer has completed the installation of the drivers you may attach your hub. Download the file at: www.cambrionix.com/software-archive

4.5. Registration

You may register your product at www.cambrionix.com

4.6. Help and Support

FAQs and help can be found on the Help page here

- www.cambrionix.com/help_pages/help.

You can raise a support ticket for more in depth support here

- www.cambrionix.atlassian.net/servicedesk/customer/portals

You can also download any of our manuals and keep up to date at the link here

- www.cambrionix.com/product-user-manuals

5.Using your PP15C

In this section you can find information information on how to use your hub in a charge only or a charge and sync application. You can also find information on managing your hub and changing port modes, connecting multiple hubs to one host and using Cambrionix Software.

5.1.Using without connecting to a host computer

When the Hub is switched on and is not connected to a local host computer it is automatically configured to charge devices using its intelligent charging algorithm. Simply connect the devices to be charged to any of the available ports (not the Host Port) using USB - compliant cables.

Once the devices are connected, the algorithm will detect the highest charge rate allowable for each attached device. Charging at the optimum rate (up to 2.1A) specified by the manufacturer will commence once profiling is complete. Depending on the state of charge of the device attached, this may take tens of seconds.

5.2.Cleaning your PP15C

Cleaning the product is generally not required, although in some instances it may be necessary if excess dirt/ dust/ hair has accumulated, or if minor liquid spillages have occurred on the module during operation or storage.

	 CAUTION
	<p>Electric shock or personal injury may occur</p> <ul style="list-style-type: none"> • If there is a dirt/ spillage over a ventilation slot, external data/ power connector or product aperture, please remove power from the unit without touching the liquid and contact Cambrionix immediately

- Ensure that the product is switched off and the power cord is removed from the product. Hold the power cable by the plug and do not touch either the plug or the power cord with wet or damp hands as an electrical shock may result
- Wipe the product with a clean, dry and soft cloth. Do not use detergents which contain alcohol, solvent or surface-active agents. Do not spray water or detergent directly onto the product
- Wet a soft and dry cloth in water and wring thoroughly to clean the product as required
- Dry the product thoroughly once the cleaning has finished
- Reconnect the power cord and use your product as advised once cleaning and drying is complete

6.Product Specifications

6.1.Input Power Requirements

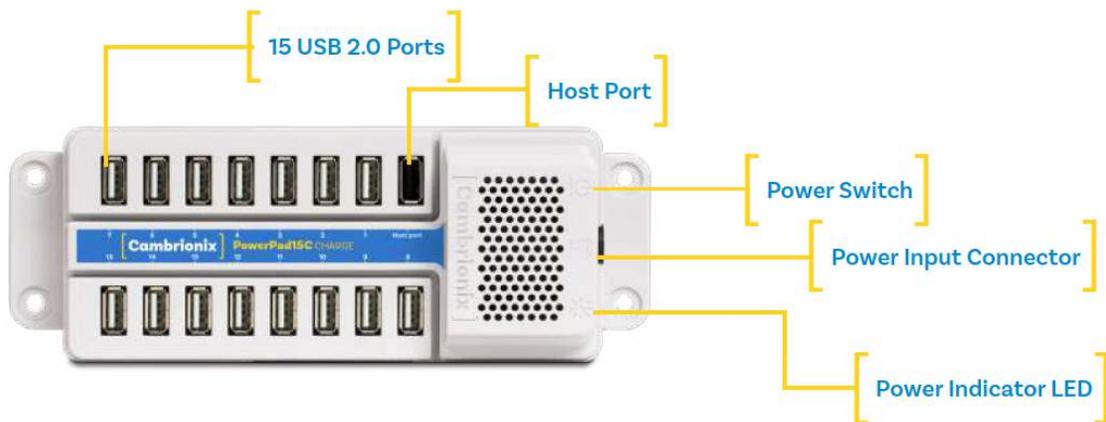
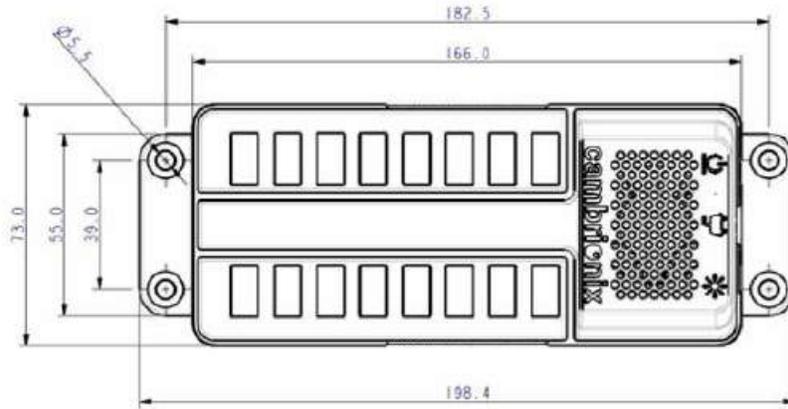
Input Voltage	12Vdc
Input Current	15A
Input Connection	4-pin DIN

6.2.Output Power

Output Voltage	5.0V +/-5%
Output Current (Max per Port)	2.1A
Output Power (Max per Port)	10W
Output Power (Total)	163.8W

6.3.Physical specifications

Input Connectors	USB 2.0 Type-A
Output Connectors	15 x USB 2.0 Type-A
Maximum Data Speed	
Ambient Operating Temperature range	0 - 35 °C
Relative humidity	5% to 95% non-condensing
Dimensions	198.4 x 73 x 40mm
Weight	1.6kg



6.4. Power Supply

Input Voltage	100-240VAC
Input Current (Typical)	4A @ 115VAC
	2A @ 230VAC
Input Frequency	50-60Hz
Input Connector	C14
Output Voltage	12V
Output Current	15A
Output Power (Max)	180W
Output Connector	4-pin DIN

7. Compliance and Standards

- CB Certificate
- CE Tested and marked
- FCC Part 15 Tested and marked
- Complies with EN60950 safety requirements for IT equipment
- Housed within a UL94-VO specification fire enclosure
- RoHS Compliant
- Independently safety tested by the Underwriters Laboratory (UL) under file #E346549

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Cambrionix Ltd
The Maurice Wilkes Building
Cowley Road
Cambridge CB4 0DS
United Kingdom

+44 (0) 1223 755 520
enquiries@cambrionix.com
www.cambrionix.com