

## The ProDurance DC/DC Control module

DC/DC Control PCB Part Number: 1420050

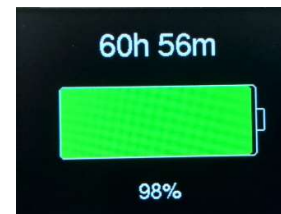
Part Number for LCD display: 1420240  
1420041

Part Number Piggyback PCB

**Description:** The Control Module converts DC voltages, regulates the individual modules to a single battery and is the port for charging, communication and adds safety to the system. It is designed to maximise flexibility from an input and output configuration and to provide essential clear information to the nurse.

**Intended Use:** part of the Produrance System, it is internally mounted, out of reach from end users.

**Benefits:** On the input side attach up to 4 Produrance Modules Batteries (plus a Power Supply). The Raw battery Voltage is then regulated for Output by an up to 98% efficient DC/DC converter. Two DC outputs can be used simultaneously from each PCB; a 3 pin monitor plug and a standard lockable barrel connector for Laptops. Cables for specific Laptop Models are available. Voltages are switchable 12V/14V (Jumper) or 19V or 24V, and apply to both outputs. A 2<sup>nd</sup> piggyback DC/DC converter can be added at any time. LEDs will show the selected Voltage on each PCB. This allows a flexible DC/DC system and avoids the potential 30% loss of the commonly used DC-AC-DC systems. However the inverter option is still open using the 14V output. For communication, the ProDurance system has two outputs: The colour LCD displayed gives the Operator a visual remaining runtime in hours and minutes. An Audio version is available. The display warns when battery capacity is low and if the Cart/application is plugged into an electrical outlet. A further communication option is the USB communication cable. This can feed the cart LED display or a PC software with standard battery info.



### Technical specs:

Weight: (127g). Height: 1.4cm. Width: 15.8 cm. Depth: 10.cm. 4 screw holes.

All connector blocks on PCB are plug-in connectors. Fast set up. 3 Pin output & Barrel socket. Central pin on the 3 Pin output, carries a sense V signal in the 19V setting to provide laptops with Power supply in signal.

Max Load. Total max load depends on total amount of batteries. One PCB with 2 batteries can deliver 150W (max 175). 2 PCBs can deliver max 300W. Batteries have to be equal to share load.

Display is 2.8 inch colour LCD Display. Updating remaining runtime every 5 seconds.

**Warranty and Support:** A quality workmanship warranty of **36 Months** applies. Please do contact DCPower4C support with any questions on solutions, limitations, and needs around the Hot Swap module, since this unit is designed with a Can-do remit.

**Regulatory:** The ProDurance system is not a medical product but complies to IEC 60601-1 as a Class I medical device accessory, and is also CE, FCC and ROHS compliant.