

# CNX-P5USB

## DC-Powered 4-Port USB Hub



The CarNetix CNX-P5USB is a DC-powered 4-port USB hub designed for automotive or embedded DC-powered applications. The P5USB includes an internal DC-DC regulator so that each of the 4 USB ports can provide up to 500mA of current to the downstream USB devices. The P5USB can be used in either a +12V or +24V automotive environment. It will operate down to 7V (survives engine cranking) and can withstand voltage transients typically found in a harsh automotive environment. The DC input includes reverse polarity protection, transient suppression, and an internal in-line, self-resetting fuse. A self-locking power cable is included.

The P5USB can be turned ON or OFF either by the car's ignition line or by sensing the presence of +5V on the upstream host USB device (PC). This helps prevent battery discharge when the PC is left in Standby for extended periods of time. The P5USB includes a Shutdown Delay jumper which can be set to allow the P5USB to remain on for either 5 minutes or 25 minutes after the Ignition is turned off. This prevents the loss of USB connectivity during short stops if the PC is left running.

The CNX-P5USB can be used in a variety of automotive, embedded, marine, mobile, or industrial applications that require the use of a DC power source (ie battery, solar). The internal DC-DC converter can stabilize a source voltage from as low as 7 volts up to 32 volts and provide a clean +5V output for the connected USB devices. Each downstream USB port is independently current limited and provides an LED indication of USB enumeration. The P5USB comes in a compact plastic enclosure that measures 5.12" x 2.84" x 1.1" and includes mounting tabs.

Feature	Spec
USB 2.0 Ports	4
Self-Powered USB 2.0 Ports	4
Max Current Per Port	500mA
Individual Port Current Protection	Yes
Individual Port LEDs	Yes
Operating Temperature	
Max Temperature (Deg C)	60 C
Minimum Temperature (Deg C)	0 C
DC (Power) Input	
Internal DC-DC Regulator	Yes
Minimum (VDC)	7
Maximum (VDC)	32
Battery Overvoltage/Surge Protection	Yes
Battery Reverse Polarity Protection	Yes
Internal In-Line Fuse	Yes
Internal Self-Resetting Fuse	Yes
Power LED	Yes
Locking Power Cable Included	Yes
Input Current	
Idle - Regulator OFF, USB not connected	2.5 mA
Regulator Off - USB connected	6 mA
Regulator On - USB connected - no devices	98 mA
Special Automotive Features	
Designed for Automotive Applications	Yes
Jumper selectable ON/OFF	Yes
Delayed Shutdown (5 min, 25 min)	Yes
12V or 24V Operation	Yes
Engine Crank Survival	Yes
Battery transient suppression	Yes
Battery Reverse Polarity Protection	Yes
Weight	4.3 oz
Width	5.12 "
Height	1.10 "
Depth	2.84 "
Warranty	1 Year