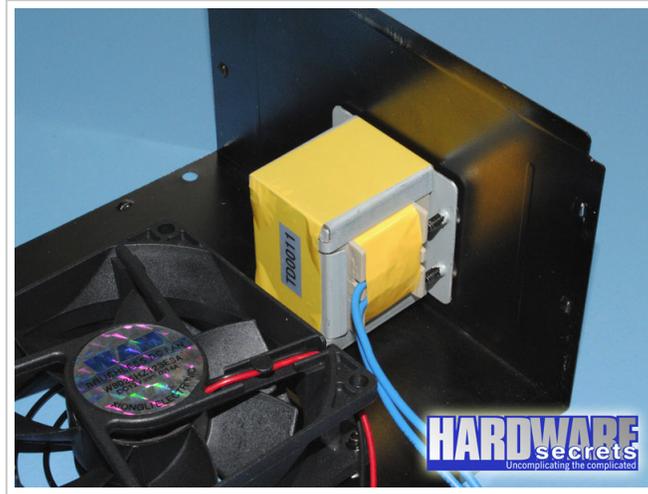


Wednesday, January 9, 2013

How to Avoid Being Ripped Off When Buying Power Supplies

When shopping for power supplies, remember these wise words, "If it seems too good to be true, it probably isn't (true)." Time and again, we hear or read about cases where counterfeit and/or fake power supplies are sold to those who are enticed by ultra low prices, but end up with big headaches instead. Here are some examples:

- 700W ATX Power Supply with 'PFC Coil Made from Cement': <http://www.hardwaresecrets.com/blog/Hantol-PSU-Fake-PFC-Made-of-Cement/220>



The yellow PFC coil is a fake that is actually made of cement

- Fake iPhone Chargers; Raspberry Pi foundation looks at counterfeit Apple power supplies: <http://hackaday.com/2012/10/10/raspberry-pi-foundation-looks-a-counterfeit-apple-power-supplies/>
- Exposing some fake electronics with too-good-to-be-true prices: <http://hackaday.com/2012/01/04/exposing-some-fake-electronics-with-too-good-to-be-true-prices/>
- Low Cost Power Supplies Can Be Expensive: <http://power-topics.blogspot.com/search/label/Power%20Supply%20Failure>
- Don't buy a cheap replacement power supply!: <http://www.youtube.com/watch?v=7nTRixIoDcI>
- UL Warns of Power Supplies with Counterfeit UL Listing Mark and UL Energy Verified Mark: <http://www.wric.com/story/20226384/ul-warns-of-power-supplies-with-counterfeit-ul-listing-mark-and-ul-energy-verified-mark>
- Fake! Counterfeit UL mark found on LED power supply: <http://www.edn.com/electronics-blogs/led-zone/4395270/Fake--Counterfeit-UL-mark-found-on-LED-power-supply>

Because there are bad guys out there who are dishonest, we come back to the question of 'how to avoid being ripped off when buying power supplies.' The answer is simple. Buy from reputable and well established companies who have been providing power supplies for at least ten (10) years. For example, TDK-Lambda has been designing and manufacturing reliable power supplies for well over 50 years and offers limited lifetime warranties on some models <http://www.us.tdk-lambda.com/lp/> . Avoid buying 'seemingly' bargain priced power supplies from eBay or other online discount websites. Fake chargers can kill your expensive cameras, smart phones and other devices.

If you work for an electronics manufacturer, remember that the switchmode power supply is the heart of your end-product or system and your company requires power supplies that will provide excellent performance and trouble free operation for many years. The last thing an OEM needs is a lawsuit or the need to recall thousands of products from the field.

If in doubt, ask the power supply vendor for the UL listed file number for the supply you are interested in using. For UL Listed and UL Recognized products, the file number is usually printed near the UL mark and typically begins with an E prefix followed by a 6 character number, e.g., E133400. If the file number is not shown, most reputable power supply vendors/manufacturers will provide the end-user with this information. Anyone can go to the UL website to check on a UL file number to make sure the supply is actually listed (approved) and to confirm the name of the manufacturer. The 'UL Online Certification Directory' is available at <http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.html>. At this website you can enter the 'UL File Number' in the box provided (e.g., E133400) and then click the SEARCH button. If the power supply is in the UL database, information about the manufacturer will be shown. If you then click one of the items shown, the associated model number(s) that conform to the specific UL safety specification(s) will be listed.

By following the above recommendations, you'll become a wise power supply consumer and thereby avoid costly mistakes in your next power supply selection and purchase.

Posted by [Power Guy](#)