



Ensuring Your CE Marked Power Supply Unit (PSU) is Fit for Purpose

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Just because you have sourced a Power Supply Unit that is CE marked does not necessarily mean that it is safe for its intended application.

Off-the-shelf PSUs are often chosen based on price. As long as it's CE marked and the specification, plugs and sockets fit, what's the problem?

PSU purchasing seems fairly straight forwards. Choose the voltage and current rating, select the country cord-set and off you go. The problem is that PSU manufacturers aim to maximise their sales by producing 'generic' PSUs that satisfy the largest markets. The growth in IT equipment has led to the need for simple, inexpensive PSUs and economies of scale have therefore given rise to a large number of PSUs being tested to the electrical safety standard IEC/EN60950-1 (Information Technology Equipment). This makes sense because IEC/EN60950-1 covers the vast majority of IT products.

Just because a PSU is CE marked doesn't mean it's safe for all applications

Although all electrical safety standards aim to ensure safe products, some market sectors have different or additional clauses that need addressing. What can be considered safe in one application may not be in another. For example, PSUs CE marked as a consequence of complying with IEC/EN60950-1 would not automatically be accepted for application with a product complying with IEC/EN60335-1 (Household and Similar Electrical Appliances). Products falling within the scope of IEC/EN60335-1 require the addition of humidity testing, which isn't usually addressed under IEC/EN60950-1.

CE Marked PSUs may still need testing

It's important to remember that manufacturers can CE mark PSUs under self-declaration. That means they decide what are the most applicable or suitable standards. It doesn't mean that they are wrong, it means you need to assess the supporting documentation supplied by the manufacturer. If the PSU was assessed to a different standard you should consider a 'gap-analysis'. Armed with a gap analysis you can determine what, if any, additional assessment needs to be carried out.



CE marking remains the responsibility of the person placing the product on the market so any risk assessment, test reports, gap analysis can be used as part of the product's Technical Documentation.

How Eurofins York (formerly York EMC Services) can help you

We can help you choose a suitably CE marked power supply. If you have already chosen an off-the-shelf one, we can assess its suitability for the intended application and our experienced engineers can perform additional tests where necessary and supply you with a test report or evidence.

For more information please contact your local Eurofins York test laboratory by clicking [here](#), e-mailing enquiry@yorkemc.com or calling us on +44 (0) 330 430 3456.