



How to Efficiently CE Mark a Range of Products for Electromagnetic Compatibility (EMC)

By Jeff Hollings
Sales Engineer
Eurofins York Ltd
www.yorkemc.com



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If you have a range of products that require CE Marking you've probably asked yourself the question as to whether you need to test them all.

In this article we discuss the question of variants, the recommended options for manufacturers and how to make sure that you have confidence in your CE Marking.

Firstly, let's just revisit what CE Marking means and what needs to be done.

As a quick overview, a manufacturer has a responsibility to design and produce products that meet the requirements of all the directives associated with CE Marking. This includes the EMC, the Low Voltage and Radio Equipment Directives amongst others. If the manufacturer is within the EU the responsibility for CE Marking lies with him, if the manufacturer is outside of the EU then the importer carries that responsibility as they place the product on the market in the EU.

A Presumption of Conformity with Directives such as the EMC Directive exists when Harmonised European (EN) Standards are correctly applied and the product has been found to meet the requirements of that standard. This is the approach taken by the vast majority of manufacturers.

Can the test results of one model of a product family be representative across a range?

The answer to this question is a definite 'yes' but with cautionary notes. The key to the success of this type of approach is the definition of the 'family' of products. If there is a technically clear progression from the 'basic' to the 'premium' model then it may be argued that the test results from the premium model are the worst case and will adequately cover the other models.

If the technical progression is more complicated, for example it is not just a case of adding more technical complexity as you move up through the range, then it may be appropriate to test more than one model in the range, or fully test one and partially test others.

Whatever rationale is taken, it is vital that this discussion takes place at an early stage in the product development.

Furthermore under a self-certification regime, the manufacturer takes the responsibility for the compliance of those products that are not tested, as well as those that are; clearly there is a cost-risk trade-off.

The EMC Directive, 2014/30/EU, requires manufacturers to draw up Technical Documentation which contains the evidence to support a product's Declaration of Conformity. It is also the place where the rationale for ensuring the compliance of a range of products is located and will contain details of the 'family', what models are to be tested and why.

2014/30/EU also has enhanced traceability requirements which includes an unambiguous link between the product and the Declaration of Conformity and is provided by the Technical Documentation.



How we can help

At Eurofins York (formerly York EMC Services) we have a wealth of experience of Technical Documentation and EMC testing. We are therefore well placed to help you review your approach to product compliance so that you can confidently place the CE Mark on your products.

Specifically we can:

- Help you devise an efficient approach to your CE marking
- Advise you on defining families of products and a suitable test regime
- Write, or assist in writing, Technical Documentation
- Provide you with testing and supporting test reports
- Perform a formal assessment of your Technical Documentation as a Notified Body

Contact your local Eurofins York Laboratory for assistance with compliance testing by e-mailing enquiry@yorkemc.com or calling +44(0)330 430 3456

Like to know more? We offer a variety of online and face-to-face compliance training courses. For more information click [here](#).