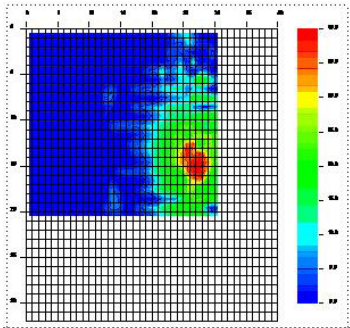


EMC as a perpetrator

During the design of costly measuring and testing apparatus the components to be used are critically inspected. Many factors and specifications are compared to each other by the designers in order to produce an optimal end product. However there could be a defect in the generated result caused by a component which was not expected in the first place...

The Challenge



One of Mulder-Hardenberg's business relations experienced this phenomenon themselves.

A disruptive defect in the results gave cause for a quest into the cause. The conclusion was reached that this would have to be

found in the input or in the processor boards used. However the manufacturers were convinced of the stability of their products, and that therefore their products were not to blame. However the problem remained.

The Solution

During a visit by one of the specialists from M-H to the business relation concerned, the problem and design of the apparatus was explained in passing. Our specialist subsequently took over the quest for the cause of the problem. After months of intensive research by the M-H technician, it emerged that even though the inputs were indeed stable, they produced unacceptable electromagnetic compatibility (EMC), which negatively influenced the results. Moreover too many inputs were used unnecessarily to provide the various sections with different voltages.

The processor boards used were excellent. But the wrong combination of specifications between the inputs and the boards aggravated the problem.

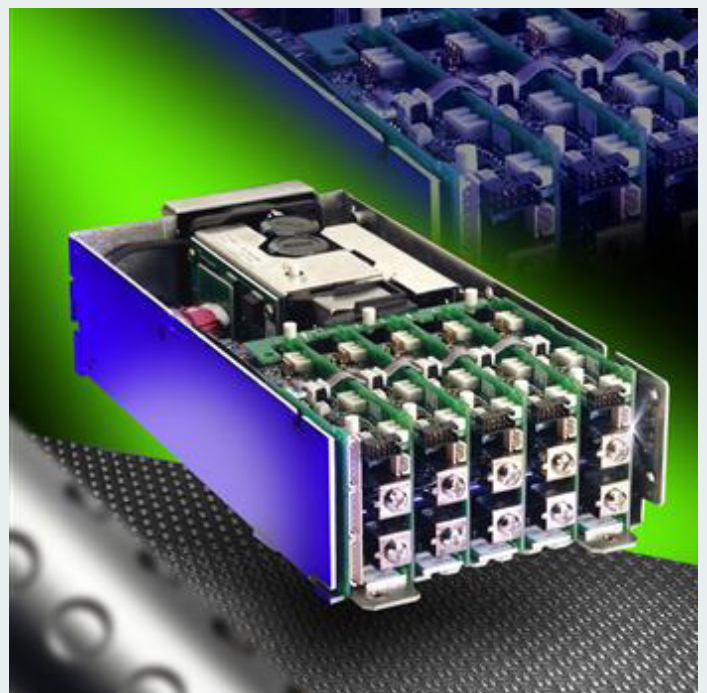
M-H, together with the business relation and manufacturer, looked for a solution which was found quickly in a somewhat modified input with the ability to supply larger as well as differing capacities. The most important property however was



the excellent EMC protection. This is not only achieved by modifying the input but also by perfecting the housing. Due to this it no longer interferes with the surrounding components.

The Implementation

After the first prototype was tested the input was put into production and was subsequently included in the modified design for our business relation. The results were immediately evident: stable and verifiable measuring and test results. A long period of single-mindedness aimed at finding a solution, without confronting the business relation with the costs of research, had hereby come to a satisfactory end.



See next page

The result

A long-lasting and stable business relationship has been created with Mulder-Hardenberg due to the experience of the M-H technician and his ability to investigate problems thoroughly and to solve them. In future new product developments will be discussed by our business relation with M-H with the aim of reaching the best end result.

Our Websites



- mulder-hardenberg.com
- mh-hminterfaces.com
- mh-fiberoptics.com
- mh-labeling.com
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