

Schaffner adds User-Friendly advanced HMI to its Ecosine Active Sync

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Schaffner, global leader in electromagnetic compatibility and power quality, has introduced a new and easier to use Human-Machine Interface (HMI) to its Active Harmonic Filter (AHF) solution, the Ecosine Active Sync.

The Ecosine Active Sync is a modular product that has been on the market for around five years and actively mitigates the harmonics sent back to an electrical network, reducing or suppressing disturbances by taking the harmonic current generated by non-linear loads and converting it. In Europe, the current level for effective harmonic mitigation is 50Hz and the AHF solution is ideal for applications where harmonics levels are continually changing, such as when producing high quality products like semiconductor wafers.

Ecosine delivers a solution for three- or four-wire system, mitigating harmonics between the phases and neutral wire. It needs to be programmed to fine-tune it to a specific application but, up until now, the traditional way of doing this has been by connecting a computer or laptop with a special cable plus associated software. At the same time, direct machine-face interaction was only possible through a 2-inch (5cm) monochrome display that required the user to press physical buttons to switch through the various parameters and enter values.

As an alternative to the monochrome Display module and the AHF Viewer PC software, Schaffner step up the user experience with the new HMI unit that uses a large 7 inch (18cm) capacitive color touch-screen. Using simple screen swipe functions familiar to any smartphone user, this modern user interface makes it more straightforward to access and view all the necessary parameters – while reading and entering values where required.

The new HMI makes it possible to change and monitor all filter parameters and measured values of the three-phase network. It can plot up to six traces in an oscilloscope style view, and ensures all measurements are saved automatically to the built-in memory (for subsequent downloading to a USB drive if needed).

With the Ecosine Active Sync used widely in such challenging and demanding sectors as the automotive and robotics industries – as well as in large data centers and semiconductor manufacturing – simplifying the AHF's operation and modernizing how users interact with it were key factors behind Schaffner developing the new HMI.

Says Luc Mosca, Product Manager at Schaffner: "This new HMI is a substantial advance on the previous user interface and enables us to upgrade the user experience to a level where interaction with the Ecosine is a much easier process. With just a simple check, the operator can see instantly whether everything is working okay or if there are any alerts, with errors or warnings displayed clearly on the large color screen."

Luc adds: "We have worked closely with customers, consulting with users about what they require from a true human-machine interface and we have come up with a solution that meets their needs. We have already received some highly positive feedback on the new HMI and we expect this to continue as more Ecosine come on-stream. When you place an order for a new Ecosine Active Sync you now have the option of having one featuring this advanced interface and we expect most new buyers will choose to work with this more user-friendly HMI. Of course, they can continue to interact with the AHF via hardwired computer or laptop and dedicated software if they prefer."

Development of the Ecosine Active Sync Cabinet is based on the extensive knowledge and experience the Schaffner Group has garnered over decades of creating solutions for power quality applications. The most common application for the Ecosine Active sync is in heating ventilation and air-conditioning (HVAC) installations and uninterruptible power supplies (UPS). They are also used across logistics, parcel sorting and luggage handling at airports as well as wind turbines, the steel industry, paper mills, tunnel ventilation and more.

Whether used as a stand-alone unit or combined with others to meet the customer's requirements, the Ecosine Active Sync is designed to meet the most demanding harmonic mitigation challenges, whatever the non-linear load involved. In the era of Industry 4.0 and smart energy management, the optional sync module monitors the filter's usage and allows redundancy to deliver a truly smart power quality solution.

For more information, visit the Schaffner website at [schaffner.com](https://www.schaffner.com)

Schaffner plays a vital role in building a sustainable future in the new era of electrification. Headquartered in Switzerland and with subsidiaries around the world, Schaffner is a global leader in electromagnetic solutions that ensure the efficient and reliable operation of electronic systems. The Schaffner Group are experts in EMC filter solutions, harmonic filters, electromagnetic components and electromagnetic solutions. Our passionate and knowledgeable employees empower our customers to develop reliable electronic devices and systems that meet compliance standards and deliver increased energy efficiency.

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