

Advanced Energy's AC/DC Board-Mounted Converter Simplifies Reliable Operation in Industrial and Telecom Applications

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Intelligent, configurable full brick AC/DC 500 W module with integrated inrush limiting and PMBus™ communication offers best-in-class 93% efficiency

DENVER, Colo.--(BUSINESS WIRE)-- Advanced Energy Industries, Inc. (Nasdaq: AEIS) – a global leader in highly engineered, precision power conversion, measurement and control solutions – expands its presence in the industrial, robotics and 5G telecom markets with the launch of the AE Artesyn AIF42 AC/DC converter. The new converter reduces system size, delivers best-in-class 93% efficiency and enhances reliability by minimizing the need for external components.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20220804005006/en/>



Intelligent, configurable full brick AC/DC 500 W module with integrated inrush limiting and PMBus™ communication offers best-in-class 93% efficiency (Photo: Business Wire)

The AIF42 full brick module is rated for 500 W of continuous power and provides integrated

functionality that facilitates ease-of-use, rapid application design and fast time-to-market. This includes a proprietary internal inrush current limiting function, which saves space, reduces overall system cost and improves reliability by eliminating the need for external components to provide inrush current protection. In addition, a 10 V auxiliary output enables low-power housekeeping circuitry to be supplied directly from the module rather than a second AC/DC power converter.

“AE’s new module is designed for applications that require high performance and reliable operation in harsh environments,” said Joe Voyles, vice president marketing, industrial power conversion products at Advanced Energy. “The new AIF42 offers industry-leading efficiency, simplifies and speeds application design, and minimizes overall bill of materials by providing built-in, application-focused features.”

The converter’s high operating efficiency across a wide load range lowers energy consumption and minimizes heat dissipation. The module’s design is optimized for I.P. sealed applications in high-pollution environments or externally mounted systems, which require solutions that are thermally bonded and contact-cooled to a cold-wall or heatsink. This results in 100% available output power at baseplate temperatures as high as 100°C.

PMBus™ control and monitoring allow designers to optimize power supply operation to the specific needs of the target application. This connectivity can also be used to access information on power supply and system health during operation in the field.

Accommodating a wide universal input range of 90-264 VAC, the AIF42 full brick module provides a nominal isolated 12 V output with load rating from 0 A to 42 A. An external hold-up function can be implemented through the addition of recommended capacitors to the module’s HVDC port.

Active current share and start-sync functionality simplify solutions implementation for applications that require two units to operate in parallel.

For detailed product information and technical specifications, visit <https://www.artesyn.com/power-supplies/websheet/660/aif-500-series>

About Advanced Energy

Advanced Energy Industries, Inc. (Nasdaq: AEIS) is a global leader in the design and manufacture of highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes. Advanced Energy's power solutions enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing and healthcare. With engineering know-how and responsive service and support for customers around the globe, the company builds collaborative partnerships to meet technology advances, propels growth of its customers and innovates the future of power. Advanced Energy has devoted four decades to perfecting power. It is headquartered in Denver, Colorado, USA.

For more information, visit www.advancedenergy.com.

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