

# Advanced Energy Unveils Ultra-Efficient Non-Isolated Digital DC/DC Converter for Compute and Telecom Equipment

Dec 07, 2022 8:30 AM

**Quarter brick module enables transition to 48 V infrastructure at efficiencies up to 97% across wide load range**

DENVER--(BUSINESS WIRE)-- Advanced Energy Industries, Inc. (Nasdaq: AEIS) – a global leader in highly engineered, precision power conversion, measurement and control solutions – today announced the company’s first non-isolated bus converter (NIBC) in industry-standard quarter-brick format for 48 V power conversion in compute and telecom applications. Operating at up to 900 W with efficiencies as high as 97%, the new Advanced Energy Artesyn™ NDQ900 DC/DC converter provides a single, regulated 12.25 V output and incorporates a PMBus interface for flexible digital control and monitoring.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20221207005060/en/>



Quarter brick module enables transition to 48 V infrastructure at efficiencies up to 97% across wide load range (Photo: Business Wire)

The NDQ900 NIBC features a wide 40 V to 60 V DC input range and is ideal for high-power

computing, networking, telecommunications, data storage and test and measurement applications requiring a regulated 48 V to 12 V bus conversion. A flat efficiency curve ensures that the quarter-brick module delivers optimum power conversion performance for a wide range of loads.

“The combination of ultra-high-efficiency operation, thermally optimized design and digital control addresses the growing demand for 48 V power conversion solutions in data center and enterprise computing systems,” said Joe Voyles, vice president of marketing, industrial power conversion products at Advanced Energy. “The high-power-density NDQ900 optimizes performance while minimizing power consumption across multiple load scenarios.”

Built around a baseplate construction that serves to improve thermal management and simplifies attachment of a heatsink, the NDQ900 is designed for optimal thermal performance. With forced air cooling, the module can deliver full power over an operating temperature range of -40 °C ~ +85° C.

The NDQ900 is a fixed-frequency converter with no minimum load requirement. It features an active current sharing capability that facilitates the connection of multiple power supplies in parallel for applications requiring higher load current or redundancy. In addition to PMBus connectivity, the module offers a remote-control function and a power good signal.

Approved to all international safety standards, the NDQ900 features an integrated under-voltage lockout (UVLO) function and protection against over-current, over-voltage and over-temperature conditions. Advanced Energy supplies the module with a two-year warranty as standard.

For detailed product information and technical specifications, visit [our website](#).

## 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 production, medical and life sciences, data center computing, networking and telecommunications. 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](http://www.advancedenergy.com).

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Source: Advanced Energy Industries, Inc.