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660-W CF-Rated Medical Power Supplies Speed Customer Time-to-Market

[Advanced Energy Industries](#) has expanded its family of convection-cooled CF-rated medical power supplies with the launch of the 660-W rated NCF660. The system-level cardiac floating (CF) rating is the most stringent medical device electrical safety classification and is intended for equipment with direct cardiac or bloodstream contact. The NCF660 family joins Advanced Energy's NCF family of products, which is described as a unique set of standard off-the-shelf power products that specify less than 10- μ A leakage current and the high levels of isolation required for these critical medical devices (see the figure).

"The nature of CF-rated medical systems, which come into direct contact with the heart, has [been that they have typically] relied upon custom-developed power supplies and a lengthy certification process. Advanced Energy introduces these pre-qualified supplies as a standard product, with the aim to simplify design of these critical medical systems while ensuring high levels of patient protection," said Emdrem Tan, executive vice president, System Power at Advanced Energy.

By implementing the NCF660, which is standard certified to the requirement of the IEC 60601-1 medical safety standard, medical system engineers can shorten time to market and reduce non-recurring engineering costs. Additionally, the product family includes built-in power surge protection and enhanced thermal and EMI shielding that simplifies system design and reduces system size, weight and bill of materials.

Applications include surgical generators, cardiac assist devices and monitors, RF ablation, pulsed field ablation (PFA), and hemodialysis. The 660-W supplies feature 5-kV defibrillator pulse protection and meet the highest possible (2 x MOPP) means of patient protection rating, which requires isolation to 4 kVac and a creepage of at least 8 mm.

In single-piece quantities, pricing is \$374.85. For more information on the NCF660 family of CF-rated power supplies, click [here](#).

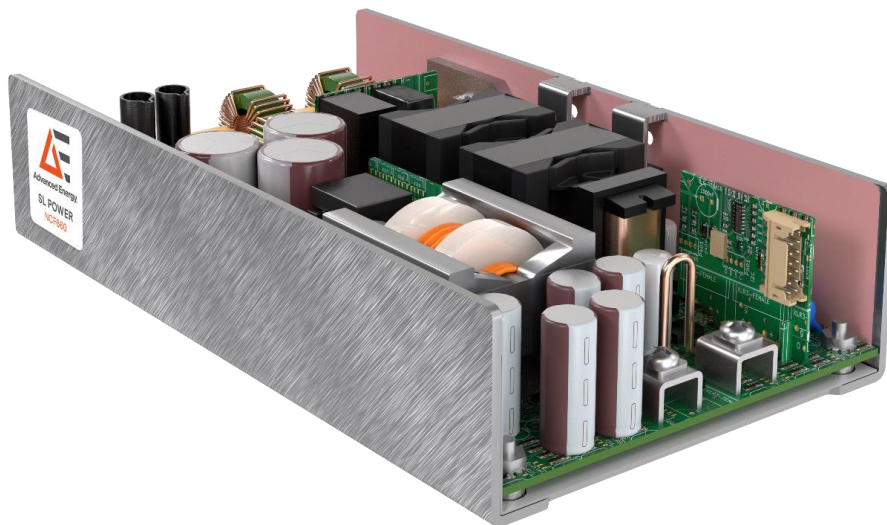


Figure. Advanced Energy's SL Power NCF660 CF expands the company's standard line of power supplies certified for cardiac applications to 660 W, enabling critical medical device designers to streamline their product development process. The CF-rated medically approved ac-dc power supplies are available with a nominal main output of 12 V, 15 V, 24 V or 48 V. They deliver the rated 660 W of output power with air flow. All models have output overvoltage, short circuit and overload protection and a 7-in. x 4-in. x 1.6-in. form factor.