DC/DC converters achieve 92% efficiency

GAIA Converter releases a new family of high input voltage DC/DC Converters targeting Avionic, Aerospace, Military and Missile applications.

Uniquely compact, the 155-480V input voltage range MGDS-175-S is ideal for 270V applications such as those with MIL-STD-704E/F requirements, or for use with Power Factor Corrected front end converters such as Gaia's HGMS-350 series.

Available in 3.3V, 5V, 12V, 15V or 26V single outputs, each is capable of delivering up to 175W in the ¼ brick industry standard package. All have ±10% voltage trim capability.
Efficiency levels are as high as 92%, and operating temperature range from -40°C to +105°C case temperature, with -55°C start up operation option available.
Protection functions are voltage lockout, current limit , over voltage & over temperature protection, and all units are permanently short circuit proof. They can be operated at zero load, and employ soft start circuitry which allows for current limiting, and eliminates inrush current during start up.

For enhanced EMI performance, a fixed switching frequency of 500kHz is used and multiple modules can be synchronised directly to force a single overall switching frequency, or can be connected to an external frequency source. Applications requiring increased power levels can parallel modules, an optional current share pin is offered to properly balance currents.
Designed for high reliability applications, the MGDS-175-S does not use optocouplers in the feedback loop.

www.gaia-converter.com [1]

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