

GROUND VEHICLE ELECTRIC POWER GENERATION AND MANAGEMENT

SUPPORTING TODAYS WARFIGHTER BY SETTING OUR SIGHTS ON TOMORROW

Future-focused power generation

Today's battlefield technology requires a proactive approach in preparation for the needs of tomorrow. Predicting what future missions will call for has been an industry priority for decades. Collins Aerospace is aggressively looking forward at what it will take to meet the demand for a better, more efficient and capable ground vehicle. To do this takes partnership and cooperation.

Collins is actively pushing forward our technologies to seek out those solutions to problems not yet identified.

End-to-end program management and over 90 years of electric power systems experience enables Collins to design new products that directly correlate with our customers' needs. With some of the best engineering teams in the industry, Collins is perfectly positioned to transition your future power generation challenges to opportunities.

KEY FEATURES & BENEFITS

- Customer-focused value streams
- End-to-end program management
- Over 100 engineers: electrical/ systems/mechanical with access to over 1,000 additional on-site engineers as needed
- Access to over 50,000 square feet of on-site lab space
- 25,000 additional square feet of lab space by 2021
- Over 100,000 square feet of production floor space
- Ability to leverage the capability and expertise of the Raytheon Technologies network.
- High electric power integration and test capability



THE FUTURE OF GROUND VEHICLE POWER GENERATION

With decades of experience as the world leader in providing electric solutions to the aerospace industry, Collins Aerospace is now applying this expertise to ground vehicles. As our teams continue to explore more electric options for future platforms, we are forward thinking and dedicated to enhancing the capability, survivability and reliability of the future combat vehicle.

RELIABLE, POWERFUL AND DURABLE ELECTRIC POWER

Tap into our thermal management and electric power expertise. Whether you require high power electronics in a small, dense package or hybrid power with electrification options, Collins is your premier source for innovation. We address your specific needs, including electric power system performance, high temperature operation and high power density. Partner with us to create the power generation and management solutions that you need for today and tomorrow's missions.

SPECIFICATIONS

Temperature resiliency Inlet EGW coolant temperature:

105 C

Ambient temperature:

-46 C to 121 C

Advanced materials Silicon carbide

Volumetric power density

Power electronics > 18 kW per liter Generator > 10 kW per liter

Power Solutions > 1 MW

Operating DC Voltages 28 Vdc to 1.2k Vdc

Efficiency

Power electronics > 97% Generator > 97%

COLLINS AEROSPACE NEXT-GENERATION GROUND VEHICLE ELECTRIC POWER SOLUTIONS



500 kW bi-directional inverter



1 MW bi-directional inverter



120 kW DC-DC universal high-voltage converter



1 MW generator



500 kW generator

Specifications subject to change without notice. This document does not contain any export controlled technical data.



COLLINS AEROSPACE

+1.815.394.3303
Matt Howes
matt.howes@collins.com
collinsaerospace.com