



KEY FEATURES

- Patented Advanced Silicon Carbide (SiC) Technology
- 200kW (400kW Peak) Power @ 105°C Coolant
- Power Density: 14.3kW/L Nom, ~21kW/L @ 105C (Peak)
- Bi-Directional for Motoring/Generation
- Size 476x262x153 mm (L x W x H)
- Weight 30kg



HARDWARE FEATURES

- High Temperature (121°C) Ambient Operation
- 3-Phase AC SiC Stage with High Voltage Interlock (HVIL)
- Dual DC Power Distribution Ports (600A Continuous)
- HVIL and Pre-charge
- Integrated EMI Filter (MIL-STD-461)
- Dual J1939 CAN Interfaces
- Inverter Parallelization and Sync Interface
- Motor/Generator Resolver Interface

SOFTWARE FEATURES

- Dynamic Control and Status Reporting Over CAN
- Temperature, Voltage, Current Sensing for System Protection
- Advanced Diagnostic Capabilities and Fault Protection
- Configurable Voltage, Frequency, Motor/Generator Parameters
- MISRA-C Compliant Codeset

Inverter Model	Electrical Output Power	Peak Efficiency	Output Current Cont/Peak (Arms)	Input DC voltage	Max switching frequency	Control voltage
Z200	200kW / 400kW Peak	99.5%+	334 / 667	300 - 800VDC	50kHz	17 - 32VDC

ENABLING ELECTRIFICATION

The Zeus Inverter development is part of GVSC's electrification efforts to control new motors, generators, and import/export power for vehicles. Whereas the automotive industry is electrifying vehicles mainly for fuel efficiency, the military is focused on enabling new capabilities such as silent mobility, energy weapons, vehicle to grid capability, extended mission duration, autonomy, and mobile command and control.

FOR FURTHER INFORMATION:

U.S. ARMY COMBAT CAPABILITIES DEVELOPMENT COMMAND
GROUND VEHICLE SYSTEMS CENTER:
DEVCOM.ARMY.MIL

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