



Innovation at the Speed of Tomorrow

RCT Systems is an industry-leading small business that designs and manufactures cutting-edge wide band gap (WBG) Gallium Nitride (GaN)/Silicon Carbide (SiC) power electronics alongside state-of-the-art energy storage systems. Our solutions cater to the most demanding environments including land-based, shipboard, airborne, and subsea/seabed domains.

- + Small Business
- + ISO 9001:2015 Certified
- + Defense
- + Energy
- + Aerospace
- + Commercial
- + Industrial
- + Intel

Power Systems Capabilities

DESIGN & DEVELOPMENT

- + Power Electronics
- + Energy Storage
- + Motor Drives
- + Real-Time Modeling
- + Controller Hardware-in-the-Loop (CHIL)
- + Power Hardware-in-the-Loop (PHIL)
- + Digital Twin Modeling
- + Thermal Analysis & Design
- + Machine Learning/AI Controls

MANUFACTURING & TESTING

- + Rapid Prototyping
- + Full Manufacturing
- + 1.0MW AC/DC LV/MV Test Facility



Technology Areas

WIDE BAND GAP (WBG) POWER CONVERTERS

SPECS

- + Si, SiC, and GaN
- + Up to 10kV+
- + 5 kW to 500kW

CHARACTERISTICS

- + Flexible DC-DC, DC-AC, AC-DC
- + High Power Density
- + Bidirectional Power Flow
- + Non-Isolated/Isolated Topologies
- + Ship Hatchable LRUs
- + Unique Packaging Geometries
- + Challenging/Harsh Environments

LARGE COMPLEX POWER SYSTEMS

SPECS

- + 100kW to 15MW
- + Up to 13.8kVAC / 1kVDC
- + Scalable/Modular

APPLICATIONS

- + Containerized Energy Storage
- + Shipboard Directed Energy
- + Shipboard Power Distribution
- + Solid-State Transformers (SST)
- + Motor Drives/Controllers
- + Electric Vehicle (EV) Fast Charging
- + Aircraft Ground Support
- + Undersea/Seabed

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Smaller. Faster. Better.