



# Mobile microgrids: the ultimate emergency backup power source for critical government and defense operations

As the U.S. Federal Government becomes increasingly dependent on resilient electric power solutions to accomplish missions, it is also becoming more vulnerable. Severe weather, natural disasters, and physical and cyberattacks can cause catastrophic damage to the electric grid and national security. Yet, these threats are mounting in frequency, scale, and sophistication. To protect our nation, truly resilient power is essential for federal entities.

**Mobile microgrids** can provide the solution. An independent, deployable power solution that can supplement power sources in the event of a disruption, mobile microgrids—such as those offered by Siemens Government Technologies (SGT) and SGT's key partner, Delta Star—are the ultimate emergency backup power source for critical government and defense operations.



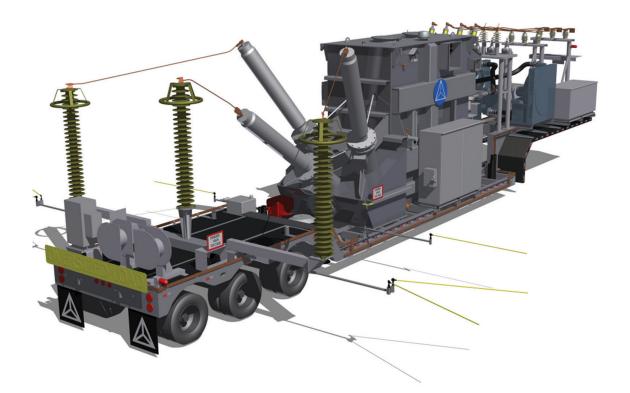
## What are mobile microgrids?

Whereas a traditional, stationary microgrid is a common resilience tool comprising interconnected assets that can be disconnected and operate independently from the greater power grid, mobile microgrids are fully functional substation replacements that deliver reliable, on-demand power when infrastructure assets are unavailable.

### Advantages of SGT and Delta Star mobile microgrid solutions:

- **Portable** Microgrids can be transported wherever they are needed via trucks because of their smaller size. For this reason, they are also known as "grids-on-a-skid".
- Rapid deployment A plug-and-play power solution, mobile microgrids can be installed quickly (often within hours) without the need to source complex and costly equipment ahead of time.
- **Configurable** Our solutions include configurable transformers, switchgears, protection, controls, and self-contained auxiliary power devices.
- Cost-effective By eliminating the need for additional equipment, our mobile microgrids can reduce overall energy spend and avoid lengthy capital expenditure processes.





# Mobile microgrid use-cases

Our mobile microgrids are extremely versatile and can provide reliable, secure and cost-efficient energy for multiple use-cases

- After extreme storms where electrical equipment and essential grid operations have been compromised, our team can deliver mobile microgrids to provide same-day energy for shelters, hospitals, water pump stations and other critical operations.
- After compromise of grids in frontline operations, our microgrids can provide short-term electricity for military installations, hospitals, and command centers while permanent solutions are developed.
- In response to unexpected and extended outages where restoration is expected to require expensive and complex restorations, such as disruptions from electromagnetic pulses (EMPs) or equipment failure, our mobile microgrids can provide on-demand power with no onsite assembly required.
- For pre-planned situations, such as scheduled maintenance or new equipment installation, our mobile microgrids can be rapidly deployed to ensure zero power disruption microgrids can reduce overall energy spend and avoid lengthy capital expenditure processes.







# Power through partnership: SGT and Delta Star

SGT, the federally focused U.S. arm of technology powerhouse Siemens, and Delta Star, a leader in microgrid and power transformer technology, have partnered to develop a comprehensive mobile microgrid solution for U.S. government facilities, military bases, and other mission-critical operations.

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- **Fully customizable** Depending on utility needs and specifications, our mobile microgrids are versatile and can be configured and adapted to meet individual use-case requirements.
- Low environmental impact Our mobile microgrid solutions use natural ester fluid (FR<sub>3</sub>), leverage progressive efficiency practices, are light and compact, and eliminate the need for side-by-side transformers in a substation.
- Robust safety and security Our mobile microgrid solutions are designed with additional safety considerations, such as enhanced protection against fire, ballistics, and other hazards, as well as advanced security, including real-time monitoring, surveillance, and alarm detection.



#### Keep the power on

To learn more about how mobile microgrid solutions from SGT and Delta Star can improve power reliability and resiliency for federal agencies, contact one of our solution experts below.

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